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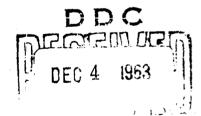
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CONSOLIDATED TRANSLATION SURVEY

Number 70

For October 1963



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CENTRAL INTELLIGENCE AGENCY
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CONSOLIDATED TRANSLATION SURVEY

FOR OCTOBER 1963

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AIBS

American Institute of Biological Sciences 2000 P Street, NW Washington 6, DC

AID - Aerospace Information Division (see AF)

ATP

American Institute of Physics 335 East 45th Street New York 17, New York

Amer Math Soc

American Mathematical Society 190 Hope Street Providence 6, Phode Island

AWRE - (see AEC)

BISI

British Iron and Steel Institute 4 Grosvenor Gardens London, SW 1, England

BRT

British Railways Board Research Department London Road, Derby

BURA

British Melding Research Association Abington Hall, Abington Cambridge, England

CB

Consultants Bureau, Inc. 227 West 17th Street New York 11, New York

CEGB

Central Electricity Generating Board Friars House 157-168, Blackfriars Road London, S.E.1, England Central Research Laboratories, Research Division Broken Hill Proprietary Co., Ltd., Shortland, 2N, New South Wales Australia

CSIRO

Commonwealth Scientafic and Industrial Research Organization 314 Albert Street
East Melbourne, C 2, Victor a
Australia

ClT

Columbia Technical Translations 5 Vermont Avenue White Plains, New York

DDC

Defense Documentation Center TISIA-1 Arlington Hall Station Arlington 12, Virginia

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Emmanuel College Research Translation Center The Fenway Boston, Massachusetts

FTD - Foreign Technology Division (see AF)

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Instrument Society of America 313 Sixth Avenue Pittsburgh 22, Pennsylvania

JPRS

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Ohio Drivo & Independence Avenue, SW Washington 25, D.C.

NASA

National Aeronautics and Space Administration 1512 II Street, NW Washington 25, D.C.

Navy

Department of Navy Office of Naval Intelligence Washington 25, D.C.

NLI.

National Lending Library for Science and Technology Poston Spo Yorkshire, England

NMS - Navy Medical School (see Mavy)

NRL - Naval Research Laboratories (see Mavy)

NZDIA

Department of Internal Affairs Translation Service Wellington, New Zealand

ONI - Office of Naval Intelligence (see Navy)

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SIAM

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USRL - US Research Laboratory (see Navy)

319th MI Bn - 319th Military Intelligence Battalion (see ACSI)

519th MI Bn - 519th Military Intelligence Battalion (see ACSI)

525th MI Gp - 525th Military Intelligence Group (see ACSI)

PROJECTS REPORTED FOR OCTOBER 1963

USSR

Economic

Engineer Bron'yus Zhalenas' Contributions to the Success of Vil'nyus Computers, by S. Naumov, 5 pp. RUSSIAN, rpt.

Development and Manufacture of Soviet Lift Trucks, by Abram Beniyaminovich Drannikov, 14 pp.

JPRS 20836

JPRS 21418

Industry, by A. A. Grigor yeva, V. P. Shotskiy, et al.

RUSSIAN, bk, Avtopogruzchiki, 1962, pp 4-15.

RUSSIAN, bk, Irkutskaya Oblast, Ekonomiko-Geograficheskaya Kharakteristika, 1962, pp 104-115. *ACSI I-3508-A ID 2246309

Working Capital of Kolkhozes, by Lev Ivanovich Kolychev, 123 pp.
RUSSIAN, bk, Oborotnyye Sredstva Kolkhozov, 1963,

pp 3-79, 112-149.

JPRS 21301

The Novosibirsk Hydroelectric Power Plant in the Plan for Utilization of the Ob' River, by A. V. Yegorev, 11 pp. RUSSIAN, rpt, Opyt Stroitel'stva Novosibirskogo Gidrouzla, 1962, pp 7-14.

ACSI I-2992 ID 2240828

The Russian Soviet Federated Socialist Republic Economic-Geographic Characteristics, by Kutaf'yev, Schastnev, 36 pp.

RUSSIAN, bk, Rossiyskaya Sovetskaya Federativnaya Sotsialisticheskaya Respublika Ekonomiko-Geograficheskaya Kharakteristika, pp 696, 697, 700-703, 712-729, 734-739, 745, 746, 754-758, 760-773.

ACSI I-2990 ID 2240826

The Role of Scientific and Engineering Personnel in Raising Labor Productivity, by F. M. Metel'skiy, 18 pp.

RUSSIAN, bk, Vop Proizvoditel'nosti Truda v Period Stroitel' Kommunizma, 1961, pp 398-413.

JPRS 21201

The Chemical Industry of Azerbaydzhan, by R. Ismaylov, 6 pp.

PUSSIAN pp. Rekinskiy Rebochiy 4 Aug 196

RUSSIAN, np, Bakinskiy Rabochiy, 4 Aug 1963, p 3.

JPRS 21176

| and Builders, 8 pp. | |
|---|------------|
| RUSSIAN, np, Bakinskiy Rabochiy, 10 Aug 1963, p 2. | JPRS 21338 |
| | |
| | |
| | |
| Instruments for Automation of Processes in Enterprises of the Dairy Industry, by A. Ya. Vaynberg, L. P. Brusilovskiy, 5 pp. | |
| RUSSIAN, per, Byull Tekh Ekon Informat, No 7, 1963, pp 45-48. | JPRS 21418 |
| Selected Articles From the Russian Newspaper Ekon Gazeta. | |
| 20 Jul 1963, pp 9-10. The Growth of Metallurgy in the Soviet Union, by V. Boyko, 13 pp. | JPRS 20856 |
| 27 Jul 1963. | |
| The Future of the Chemical Industry in the Soviet Union, by N. Baybakov, 6 pp, (p 7). | JPRS 21176 |
| Main Attention to the Chemical Processing of Timber, by G. Orlov, 5 pp, (p 12). | JPRS 21371 |
| There Must Be More Knitted Cloth, by B. Kislyakov, 5 pp, (p 13). | JPRS 21371 |
| Drawing Up the Draft Economic Plan, by P. Amel'kin, 5 pp, (p 15). | JPRS 21368 |
| Economic Planning Lipetskaya Oblast, by M. Cherkasov, 6 pp, (p 17). | JPRS 21368 |
| Production Planning at the Chemical Plant imeni Kuybyshev, by V. Berezovskiy, 5 pp, (p 31). | JPRS 21176 |
| Improving Planning, 9 pp, (pp 34, 35). | JPRS 21351 |
| 3 Aug 1963, p 5. Cooperation in Heavy, Power-Engineering and Transport Machine Building, by A. Topchiyev, 5 pp. | JPRS 21368 |
| 10 Aug 1963. Planning for 1964 and 1965 in the Donetskiy | |
| Economic Region, by N. Khudosovtsev, 5 pp, (p 4). | JPRS 21384 |

Conference of Central Asian Chemical-Industry Workers

USSR Economic (Contd)

Selected Articles From the Russian Newspaper Ekon Gazeta. (Contd)

10 Aug 1963.

Development of Synthetic Rubber Industry, by
L. Morozov, 6 pp, (p 18).

Replacement of Foodstuffs With Synthetics as
Raw Material For Chemical Products, by
L. Koposov, A. Chernyshev, et al, 5 pp, (p 19).

JPRS 21338

Synthetic Rather Than Natural Foodstuffs, by

*ACSI I-3485

L. Koposov, A. Chernyshev, et al, (p 19).

ID 2246307
525th MI Gp

17 Aug 1963, p 10.

JPRS 21297

17 Aug 1963, p 10. The Outlook for the Sulfuric Acid Industry, by V. Krasnushkin, 6 pp.

24 Aug 1963, p 4. JPRS 21422 Gor'kiy Motor Vehicle Plant Experiences Difficulties in Procuring Parts, by I. Kiselev, 5 pp.

31 Aug 1963. JPRS 21354 USSR Abrasives Production, 5 pp.

Feed Will Guarantee Milk and Meat, 8 pp. RUSSIAN, per, Ekon Sel'skogo Khoz, No 7, 1963, pp 1-7.

JPRS 21351

Improving the Material and Technical Basis in Agriculture, by M. Lemeshev, 12 pp. RUSSIAN, per, Ekon Sel'skogo Khoz, No 7, 1963, pp 8-17.

JPRS 21351

Selected Articles From the Russian Newspaper Izvestiya.

26 Jun 1963, p 4. Criminal Waste at the Irkutsk Aluminum Plant, by L. Shinkarev, 7 pp.

JPRS 21274

27 Jun 1963.
Inferior Quality: A Persistent Feature of Textile Production, 5 pp.

JPRS 21083

1 Aug 1963, p 3. News of Large-Scale Chemical Industry in Kazan'. Roston, and Krasnodardkiy Kray, 5 pp. JPRS 21338

Selected Articles From the Russian Newspaper Izvestiya. (Contd)

| 4 Aug 1963, pp 3, 4. Greater and More Efficient Livestock Production, 8 pp. | JPRS 21351 |
|---|----------------------------|
| 10 Aug 1963, p 3. Improvement of Machine Building Called For, by A. Gromov, 5 pp. | JPRS 21178 |
| Methodological Problems in Optimum Planning of the Geographical Distribution of the Individual Branches of Industry, by L. A. Kozlov, 11 pp. RUSSIAN, per, Iz Sibir Otdel Ak Nauk SSSR Ser Obshch Nauk, No 5, 1963, pp 21-28. | JPRS 21323 |
| Condition and Prospects for Development of the USSR Filter Industry, by B. N. Borosoglebskiy, 8 pp. RUSSIAN, per, Khim Mashinostroyeniye, No 4, Jul-Aug 1963, pp 1-4. | JPRS 21271 |
| New Machines, Instruments and Apparatus, 6 pp. RUSSIAN, per, Khim Mashinostroyeniye, No 4, 1963, pp 44, 45. | JPRS 21271 |
| The Economy of Magadanskaya Oblast, by P. Afanas'yev, 10 pp. RUSSIAN, per, Kommunist, No 10, Jul 1963, pp 89-95. | JPRS 21368 |
| Glass Plastics Production in Armenia, by A. Armaganyan, 5 pp. RUSSIAN, np, Kommunist, 2 Aug 1963, p 2. | JPRS 21176 |
| Complaints About Poor Quality of Production, by A. Novikov, 5 pp. RUSSIAN, np, Komsomol'skaya Pravda, 23 Aug 1963, p 1. | JPRS 21422 |
| New Types of Products, by G. S. Terziyev, O. I. Kuperman, et al. RUSSIAN, per, Konservnaya i Ovoshchesushil Prom, No 8, 1963, pp 20-22. | *ACSI I-3539 ID 2250283 |
| Large-Scale Chemistry Pushes On, by M. Komolov, 9 pp. RUSSIAN, np, Leningrad Pravda, 5 Jul 1963, p 3. | JPRS 21274 |
| Full Loading of Equipment, by A. Solov'yev, 6 pp. RUSSIAN, np. Leningrad Pravda, 24 Aug 1963, p 2. | JPRS 21382 |

| Analog System of Program Control of Drilling Machines, by V. A. Guseva, V. P. Zotov, et al, 8 pp. RUSSIAN, per, Mashinostroitel, No 7, 1963, pp 6-8. | JPRS 21249 |
|--|------------|
| Development and Acceleration of Technical Progress | |
| in the Food Industry, 5 pp. RUSSIAN, per, Maslobyno-Zhirovaya Promi, No 7, 1963, pp 1-3. | JPRS 21371 |
| Recent Advances and Problems of Soviet Metallurgy, | |
| by M. A. Pertsev, 8 pp. RUSSIAN, per, Metallurg, No 7, 1963, pp 1-3. | JPRS 21319 |
| Improvements of the Process of Smelting Structural and Tool Steels, by Yu. K. Vorob'yev, V. I. Simonov, | |
| 5 pp. RUSSIAN, per, Metallurg, No 7, 1963, pp 15-17. | JPRS 21319 |
| Assortment and Quality of Dairy Products in 1962, | |
| by B. Peshkov, 8 pp. RUSSIAN, per, Molochanaya Prom', No 7, 1963, pp 36-38. | JPRS 21371 |
| Now Equipment for Welding Work, by M. V. Khanapetov, | |
| 7 pp. RUSSIAN, per, Montazhnyye i Spetsial'nyye Raboty v Stroitel'stve, No 7, 1963, pp 18-22. | JPRS 21249 |
| Moscow City 1963 Six Months Plan Fulfillment, 8 pp. RUSSIAN, np, Moskov Pravda, 26 Jul 1963, pp 1, 2. | JPRS 21384 |
| Progress in Operation of Kazakh Railroad Set Back by Failure to Exploit Existing Capacities, by | |
| S. Bayzhanov, 8 pp. RUSSIAN, per, Narod Khoz Kazakh, No 5, 1963, pp 14-18. | JPRS 21284 |
| A Single Plan and Unified Leadership, by S. I. Kadyshev, | |
| 5 pp. RUSSIAN, per, Narod Khoz Uzbek, No 6, 1963, pp 22-29. | JPRS 21175 |
| The Role of Scientific-Technical Societies in the | |
| USSR, 8 pp. RUSSIAN, per, Nauch-Tech Obshch SSSR, No 4, 1963, pp 2-4. | JPRS 21395 |
| The Fishing Industry Must Be in the Center of | |
| Attention, by V. Chernyshev, 8 pp. | |
| RUSSIAN, per, Partiynaya Zhizn', No 15, Aug 1963, pp 15-20. | JPRS 21371 |

USSR Economic (Contd)

| Bases for Economic Planning of New Machinery, by D. L'vov, A. Ivanov, 13 pp. RUSSIAN, per, Plan Khoz, No 5, 1963, pp 26-35. | JPRS | 21188 |
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| Increasing the Economic Efficiency of Soviet Transportation, by T. Lazarenko, 9 pp. RUSSIAN, per, Plan Khoz, No 7, 1963, pp 37-41. | JPRS | 21284 |
| An Improved Machine Building Foundation is Needed by the Typographical Industry, by G. P. Smirnov, 7 pp. | | |
| RUSSIAN, per, Poligraf Proizvodstvo, No 7, 1963, pp 4-6. | JPRS | 2126? |
| Reasons for Construction Delays in Aluminum Industry Enterprises in Krasnoyarsk Sovnarkhoz, by I. Artamonov, 5 pp. | | |
| RUSSIAN, np. Pravda, 13 Jul 1963, p 2. | JPRS | 21274 |
| Severodonetsk Conference of Ukrainian Chemists Discusses Industry Problems, by M. Bagrov, 5 pp. RUSSIAN, np, Pravda, 31 Jul 1963, p 2. | JPRS | 21176 |
| Economic Planning in the Kazakh Republic, 5 pp. RUSSIAN, np, Pravda, 13 Aug 1963, p 2. | JPRS | 21384 |
| Natural Resources of the Sivash Gulf Waters, by F. Ovcharenko, 5 pp. RUSSIAN, np, Pravda Ukrainy, 2 Aug 1963, p 3. | JPRS | 21176 |
| Ukrainian Industrial Progress, 5 pp. RUSSIAN, np, Rabochaya Gazeta, 7 Aug 1963, pp 1, 3. | JPRS | 21384 |
| An Optimum Sized Train for the Transportation of Timber in the Irtysh Basin, by E. Mukhin, 5 pp. RUSSIAN, per, Rechnoy Transport, No 5, 1963, p 8. | ID 22 | I-3317-A 246277 1 MI Gp |
| Summary of the Development of the River Transport of the RSFSR in the First Four Years of the Seven-Year Plan, by M. Chebotarev, 9 pp. RUSSIAN, per, Rechnoy Transport, No 7, 1963, pp 6-9. | JPRS | 21284 |
| Ways for the Development of the Ship-Repair Base of the Ministry of the River Fleet, by N. Belov, 5 pp. RUSSIAN, per, Rechnoy Transport, No 7, 1963, pp 21-22. | | 21 284 |
| New Textile Fibers Used in Sewing Industry, by P. S. Morozovskaya, 5 pp. RUSSIAN, per, Shveynaya Prom', No 3, May-Jun 1963, | | |
| pp 19-23. | JPRS | 21371 |

| Put Planning on a Scientific Basis, by M. Rossinskiy, | |
|--|------------|
| 6 pp. RUSSIAN, per, Sluzhba Byta, No 2, Jul 1963, pp 16, 17. | JPRS 21371 |
| Economic Development in the Estonian SSR, by | |
| V. Kyao, 5 pp. RUSSIAN, np. Sovet Estoniya, 8 Aug 1963, p 2. | JPRS 21384 |
| New ConditionsNew Tasks, by A. Smirnov, 6 pp. RUSSIAN, per, Sovet Torgovlya, 25 Jul 1963. | JPRS 21371 |
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| RUSSIAN, per, Sudostroyeniye, No 7, 1963, pp 79-81. | JPRS 21284 |
| Organizing the Tashkent Plastic Products Plant, by I. Rogov, 5 pp. RUSSIAN, np, <u>Tashkent Pravda</u> , 26 Jul 1963, p 2. | JPRS 21338 |
| Growing Textile Industry Requires High-Efficiency | |
| Looms, by A. Kh. Kim, 8 pp. RUSSIAN, per, Tekstil'naya Prom', No 7, 1963, pp 5-10. | JPRS 21382 |
| New Machinery for the Finishing Industry, by G. G. Zelenskaya, 8 pp. | |
| RUSSIAN, per, Tekstil'naya Prom, No 7, 1963, pp 10-15. | JPRS 21382 |
| New Mechanization Equipment for Coal Mining, by A. V. Topchiyev, 7 pp. | |
| RUSSIAN, per, <u>Ugol</u> *, No 8, 1963, pp 10-12. | JPRS 21266 |
| Industrial News and Announcements, 5 pp. RUSSIAN, np, Vechernaya Moskva, 26 Jun 1963, p 7. | JPRS 21269 |
| Control-Panel Electrical Measuring Instruments, | |
| 7 pp. RUSSIAN, per, Vest Elektroprom, No 7, 1963, pp 71-77. | JPRS 21269 |

Selected Articles From the Russian Periodical Vestnik Statistiki.

No 6, 1963, pp 13-23.
An Output Index Based on Production Cost
Norms, by I. Pogosov, 14 pp.

JPRS 21236

No 7, 1963.

Communal Livestock Raising, by A. Lutsenko, 19 pp, (pp 17-27).

JPRS 21351

Changes in the Sale of Food, by I. Belyayevskiy, 11 pp, (pp 28-35).

JPRS 21371

Certain Data on Random Inspection of the Use of Manufacturing Equipment in Machine Building, 13 pp. (pp 86-96).

JPRS 21249

Selected Articles From the Russian Periodical Vest Vses Nauch-Issled Inst Zheleznodorozhnogo Transporta, No 2, 1963.

*ACSI I-3385 ID 2246294

- A. Basic Results From Traction Tests on the Main Line VL-10 Electric Locomotive, by E. G. Bobe, G. V. Grandova, (pp 3-9).
- B. Selection of Design Parameters for Traction Turbines of Gas Turbine Locomotives, by E. T. Bartosh, (pp 9-13).
- C. Results of Thermotechnical Traction Tests of the TGMZA Diesel-Electric Locomotive, by N. N. Kornev, A. S. Yeremeyev, (pp 16-19).
- D. Gas Turbine Locomotives With Mechanical and Hydraulic Transmissions, by V. P. Demidov, Yc. A. Sen-Zhelen, (pp 63, 64).

Selected Articles From the Russian Periodical Zheleznodorozhnyy Transport.

No 4, 1963. A. Collaboration of the Socialist Countries in the Development of Transportation, by V. S. Gavrilov, (pp 26-31). *ACSI I-3406 ID 2246297

- B. Cooperation, Interaction of Rail and Auto Transportation, by F. I. Shaul'skiy, N. K. Sologub, (pp 31-34).
- C. What Should Future Locomotives Look Like?, by N. A. Fufryanskiy, (pp 51-57).

Selected Articles From the Russian Periodical Zheleznodorozhnyy Transport. (Contd)

No 4, 1963. D. A Type of Dual-Supply Electric Locomotive, by B. V. Suslov, (pp 57-60). *ACSI I-3406 ID 2246297

- E. Increasing the Productivity of the VL8 Electric Locomotive, by S. K. Grishchenko, P. I. Bortsov, (pp 74-77).
- F. Progressive Technology in the Organization of Local Work on Extended Runs, by V. I. Pyishkin, (pp 78-80).
- G. Temporary Two-Way Automatic Block Signal on a Dual Stretch of Track When One Line is Closed, by A. M. Kandelinskiy, (pp 80, 81).

No 6, 1963. A. Full Use of the Advantages of the New Types of Traction, (pp 3, 4). *ACSI I-3407 ID 2246298

- B. Important Problems Involved in Highly Productive Use of Rolling Stock on Extended Runs, by S. F. Nachuchenko, (pp 5-10).
- D. Technical and Economic Comparison Between Electric and Diesel Traction, by N. P. Belen'kiy, (pp 17-21).
- E. Complex Development of the Economy- An Important Condition for Locomotive Operational Productivity, by D. V. Petrov, (pp 22-24).
- F. Optimum Lengths of Sections for Handling Locomotives and Runs for Locomotive Brigades, by N. V. Galkin, (pp 24-28).
- G. Certain Economic Questions Concerned With Increasing the Effectiveness of the New Types of Traction, by I. D. Myishkovskiy, (pp 36-39).
- H. Switches on Reinforced Concrete Ties, by M. A. Frishman, (pp 49-52).

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USSR Economic (Contd)

Selected Articles From the Russian Periodical Zheleznodorozhnyy Transport. (Contd)

| No 6, 1963. K. Express Trains on the October Railroad, by N. B. Gankin, V. A. Popov, (pp 69-73). | *ACSI I-3407 ID 2246298 |
|---|----------------------------|
| L. Complex Mechanization in the Repair of Diesel Locomotives, by A. I. Ivanov, B. V. Kovanev, (pp 73-76). | |
| M. An Advanced Technology for Depot Repair of Freight Cars, by G. D. Buk'ko, V. P. Nesterovich, (pp 82-85). | |
| Development of Chemical Industry in Pelorussia, | |
| by S. Cherepovich, 5 pp. BELORUSSIAN, np, Sovet Belorussiya, 15 Aug 1963, p 2. | JPRS 21338 |
| Large-Scale Chemical Industry in Belorussia, 7 pp. BELORUSSIAN, np. Sovet Belorussiya, 16 Aug 1963, p 1. | JPRS 21297 |
| Polymers for Use in Everyday Life, by V. Belyy, | |
| 6 pp. BELORUSSIAN, np, Sovet Belorussiya, 22 Aug 1963, p 2. | JPRS 21419 |
| Development and Distribution of the Sugar Industry in the Ukrainian SSR, by Vladimir Nikolayevich Lips'kiy, 175 pp. UKRAINIAN, bk, Rozvytok i Rozmishennya Tsukrovogo Vyrobnytstva Ukrayins'koyi SSR, Chap I-V, 1962, | |
| pp 1-123. | JPRS 21295 |
| Political | |
| Izvestiya Censures Worker's Economic Manipulations, | |
| 6 pp. RUSSIAN, np. <u>Izvestiya</u> , 22 Sep 1963, p 6. | JPRS 21330 |
| Soviet Press Parallels Chinese Communist and Western Militarists, by Boris Dmitryev, 6 pp. RUSSIAN, np, Izvestiya, 25 Sep 1963, p 2. | JPRS 21331 |
| The Party of All the People, by N. Lomakin, 15 pp. RUSSIAN, per, Kommunist, No 12, 1963, pp 12-22. | JPRS 21165 |

Political (Contd)

| The National Liberation Movement in a New Stage, by Ye. Zhukov, 13 pp. RUSSIAN, per, Kommunist, No 12, 1963, pp 23-32. | JPRS 21165 |
|---|---------------------------|
| The Contemporary Stage of the National Liberation Movement, by G. Starushenko, 14 pp. RUSSIAN, per, Politicheskoye Samoobrazovaniye, No 8, 1963, pp 33-42. | JPRS 21433 |
| Selected Articles From the Russian Newspaper Pravda. | |
| 17 May 1963, p 2. All Forces of Science for Construction of Communism, by M. V. Keldysh, 8 pp. | ACSI I-2728 ID 2235144 |
| 16 Aug 1963, pp 2, 3. Pravda Accuses the Chinese Leaders of Being to the Left of Common Sense, by V. Korionov, 8 pp. | JPRS 21203 |
| 28 Aug 1963, pp 2, 3. The Strategy of Socialism and Peace, by L. Leont'yev, 8 pp. | JPRS 21167 |
| 1 Sep 1963, pp 5, 6. The Revolutionary Humanism of the Leninist Communists, by E. Bagramov, 7 pp. | JPRS 21167 |
| 16 Sep 1963, pp 2, 3. Against a False and Dangerous Path, by Dolores Ibarruri, 9 pp. | JPRS 21433 |
| 17 Sep 1963, pp 3, 4. To the Detriment of the Struggle of the People: The Depraved Position of the Leaders of the Communist Party of China on Problems of the Modern National-Liberation Movement, by K. Brutents, 8 pp. | JPRS 21433 |
| 24 Sep 1963, p 1. Learn to Count, Spend National Money Sensibly, 5 pp. | JPRS 21224 |
| 28 Sep 1963, p 1. Raise all Collective and State Farms to the Level of Leading Ones, 5 pp. | JPRS 21304 |
| 30 Sep 1963, p 3. Soviet Worker Claims the Chinese Leaders Slander His Party and People, by Vasiliy Murav'yev, 8 pp. | JPRS 21433 |

USSR Political (Contd)

| Political (Contd) | |
|--|----------------------------|
| Scientists in Ideology: From the General Meeting of the Academy of Sciences Estonian SSR, by M. Ode, V. Kubarev, 6 pp. RUSSIAN, np. Sovet Estoniya, 2 Aug 1963, p 3. | JPRS 21390 |
| The Enhanced Role of the Party in the Transition From Socialism to Communism, by I. Volkov, 6 pp. RUSSIAN, np, Sovet Estoniya, 14 Sep 1963, pp 2, 3. | JPRS 21433 |
| After the Moscow Agreement on the Test Ban Treaty, by Raymond Guyot, 11 pp. FRENCH, per, Cahiers du Communisme, No 9, 1963, pp 5-14. | JPRS 21433 |
| Khrushchev in Yugoslavia, by Lucio Libertini, 13 pm. ITALIAN, np. Mondo Nuovo, 1 Sep 1963, pp 8, 9. | JPRS 21192 |
| Military Privileges for Servicemen Discharged From the Army, | |
| by M. P. Karpushin, 18 pp. RUSSIAN, bk, L'goty Dlya Voyennosluzhashchikh Uvol'nyayemykh iz Armii, 1960, 32 pp, Encl to RV-1148-61 513th IG Gp. | ACSI I-2823 ID 2188855 |
| Training of the Soldier and Rifle Squad in Combat Actions, by G. Isakov, F. Gravrikov, et al. RUSSIAN, rpt, Obucheniye Soldata i Strelkovogo Otdeleniya Deystviyam v Boyu, Moscow, 1963, 80 pp. | *ACSI I-3432 ID 2246300 |
| Instructions for Registration of Private and Non-Com Reservists Liable for Active Duty, 59 pp. RUSSIAN, bk, Rukovodstvo po Uchetu Yoyennoobyazannykh Ryadovogo i Mladshego Nachal'stvuyushchego Sostava Zapasa, 1940, pp 1-57. | ACSI I-2825 ID 2237289 |
| War and Human Resources, by P. V. Sokolov, 25 pp. RUSSIAN, bk, Voyna i Lyudskiye Resursy, 1961, pp 129-142, 162-179, Encl No 5 to R-455-61, OARMA, Moscow. | ACSI 1-2819 ID 2190060 |
| Standardization of Tanks Mounted on Trucks and Trailers, by I. Yegyazarov, Yu. Sokolov. RUSSIAN, per, Avtomobil Transport, No 5, 1963, pp 41, 42. | *ACSI I-3535 ID 2250281 |
| Suicidal Strategy, by V. D. Sokolovskiy, 8 pp. RUSSIAN, np, Krasnaya Zvezda, 19 Jul 1962, p 4. 9670289 | FTD-TT-63-811 |

USSR Military (Contd)

| Army of th | e All- | People | 's S | tate, | by Ye | e. Suli | inov, | 7 pp. |
|------------|--------|--------|------|--------|-------|---------|-------|-------|
| RUSSIAN, n | o, Kra | snaya | Zvez | da, 12 | Feb | 1963, | pp 2, | 3. |

JPRS 21183

Influence of Rocket Nuclear Weapons on the Use of Aviation at Sea, by V. G. Rog. RUSSIAN, per, Morskoy Sbornik, Vol XLVI, No 6, 1963, pp 31-37.

*Navy/ONI

Defense Against Missile and Space Weapons, by S. P. Lukin, 11 pp. RUSSIAN, per, Morskoy Sbornik, No 8, 1963, pp 27-34.

JPRS 21394

The Trespasser Won't Get Past, 6 pp.
RUSSIAN, per, Starshina-Serzhant, No 5, 1963,
pp 22-24.

ACSI I-3195-A ID 2244402 319th MI Bn

How an Explosion Takes Place, by M. Novikov. RUSSIAN, per, Voyennyye Znaniya, No 3, 1963, p 22.

*ACSI I-3481 ID 2246303 525th MI Gp

Tanks Under White Chutes.
GERMAN, per, Aero-Sport, No 3, 1963, pp 96-99.

*ACSI I-3351 ID 2246290 525th MI Gp

Geographic

Selected Articles From the Russian Book Irkutskaya Oblast, Ekonomiko-Geograficheskaya Kharakteristika, 1962.

*ACSI I-3508 ID 2246309

- B. The South, The Irkutsk-Cheremkhova Region, (pp 138-162).
- C. The Northwest -- The Bratsk-Ilimsk Region, Central Angara Area, (pp 174-218).
- D. The Northeast -- Leno-Vitimsk Region, (pp 219-237).

USSR Sociological

| Study of Contour Lines in High School, by F. M. Movchan, 49 pp. RUSSIAN, bk, Izucheniye Gorizontaley v Sredney Shkole, 1958, 79 pp. | ACSI I-2679 ID 2235115 |
|---|---------------------------|
| The Literature of Optimism, by V. Shcherbina, 12 pp. RUSSIAN, per, Kommunist, No. 12, 1963, pp 42-50. | JPRS 21165 |
| Communist Education is a Creative Process, by P. Ignatovskiy, 9 pp. RUSSIAN, per, Kommunist, No 12, 1963, pp 51-57. | JPRS 21165 |
| Fist-Fighting is a Sign of Low Morals and Unworthy of the Soviet Man, by V. Lyashenko, 5 pp. RUSSIAN, np, Komsomol'skaya Pravda, 4 Sep 1963, p 2. | JPRS 21418 |

EASTERN EUROPE

Economic

Concerning Problems in the Development of the Machine Industry, 11 pp. ALBANIAN, per, Rruga e Partise, Vol X, No 8, 1963, pp 3-12. JPRS 21230 Perfecting Management in the National Economy, BULGARIAN, per, Ikonomicheska Misul, No 6, 1963, pp 3-14. JPRS 21248 The Intensification of Agricultural Production in Bulgaria, by Gat'o Gatev, 39 pp. BULGARIAN, per, Ikonomicheska Misul, No 6, 1963, pp 52-64. JPRS 21208 The Bulgarian Ship Registry, by Neno Khalachev, BULGARIAN, per, Korabostroene, Vol II, No 5, 1963, pp 1, 2. JPRS 21287 The Standard Design and Construction Industrialization Institute, by Aleksandur Popov, 11 pp. BULGARIAN, per, Stroitelstvo, Vol X, No 4, Jul-Aug 1963, pp 29, 30. JPRS 21366 Problems Relating to the Profitableness of Bulgarian Foreign Trade, by Pencho Radkovski, 11 pp. BULGARIAN, per, Vunshna Turgoviya, No 8, 1963, JPRS 21275 pp 3-8. Problems of the Bulgarkontrol Goods Control Organization in the Bulgarian Chamber of Commerce, by Anastas Yazov, 5 pp. BULGARIAN, per, Vunshna Turgoviya, No 8, 1963, JPRS 21275 pp 17, 18. The Problem of Developing Passenger Traffic and the Construction of New Passenger Boat, by Radovan Dravic. CROATIAN, per, Broadarstvo, Vol V, No 16, 17, *ACSI I-3518-A Jul-Dec 1962, pp 713-717. ID 2246314 Development of Inland Waterways Shipbuilding Industry and Its Contribution to Construction of River Vessels, by Caslav Johlicka. CROATIAN, per, Broadarstve, Vol V, No 16, 17, *ACSI I-3518-B Jul-Dec 1962, pp 721-725. ID 2246314

| Building and Rebuilding of Floating Craft Used for Supply of River Sand and Gravel to Building Construction Industry, by Branko Catic. CROATIAN, per, Broadarstvo, Vol V, No 16, 17, Jul-Dec 1962, pp 743-748. | *ACSI I-3518-C ID 2246314 |
|--|------------------------------|
| Shipbuilding in 1962 and 1963 in Split Shipyards, by Igor Belamaric, 33 pp. CROATIAN, per, Brodogradnja, Vol XIV, No 3, May-Jun 1963, pp 75-89. | JPRS 21369 |
| The 1963 Social Plans of the Republics, by Milentije Pesakovic, 20 pp. CROATIAN, per, Finansije, No 3, 4, 1963, pp 145-158. | JPRS 21063 |
| Financing of Economic Investments From Central Funds From the Point of View of the Federal Social Plan for 1963, by Teodar Starcevic, 14 pp. CROATIAN, per, Finansije, No 3, 4, 1963, pp 166-177. | JPRS 21063 |
| The Export of Industrial Products, 10 pp. CROATIAN, per, <u>Jugoslovenski Pregled</u> , No 6, 1963, pp 273-276. | JPRS 21194 |
| The Export of Ships, 7 pp. CROATIAN, per, Jugoslovenski Pregled, No 6, 1963, pp 277, 278. | JPRS 21194 |
| Economic Relations With Poland, 11 pp. CROATIAN, per, <u>Jugoslovenski Pregled</u> , No 6, 1963, pp 279-282. | JPRS 21194 |
| The Concentration of Assets in Industry of the USSR and the Eastern European Countries, by Bruno Belic, 20 pp. CROATIAN, per, Medjunarodni Problemi, No 1, | |
| Jan-Mar 1963, pp 83-98. Preparations for the Seven-Year Plan 1964-1970, by M. Vajs, 5 pp. | JPRS 21289 |
| CROATIAN, per, Nova Trgovina, No 7, 8, 1963, pp 292-294. Production of Synthetic Rubber in Yugoslavia, by | JPRS 21248 |
| Slavko Mihajlovic, 21 pp. CROATIAN, per, Tehnika, Vol XVIII, No 8, 1963, pp 1529-2536. | JPRS 21369 |

Complex Soil Research in Czechoslovakia, by J. Damaska, J. Nemecek, 9 pp. CZECH, per, Mezinarodni Zemedelsky Casopis, Vol VII, No 3, 1963, pp 24-27. JPRS 21179 Legal Problems of Cooperative Enterprises in Socialist Countries, by II. Spiller, 11 pp. GERMAN, per, Aussenhandel und Innerdeutscher Handel, Vol XIII, No 7, 1963, pp 4-8. JPRS 21342 Methods for Determining Demand in East German Foreign Trade With Socialist Countries, by H. Seidel, H. Schneider, 11 pp. GERMAN, per, Aussenhandel und Innerdeutscher Handel, Vol XIII, No 7, 1963, pp 14-17. JPRS 21342 The New Self-Propelled Diesel Vehicles of the East German Pailroad, by C. Schwerin, 26 pp. GERMAN, per, Deutsche Eisenbahn Technik, Vol II, No 6, 1963, pp 246-254. JPRS 21210 Some Priority Tasks in the Telephone and Teletype System, by Egon Zirzow, 20 pp. GERMAN, per, Die Deutsche Post, No 6, 1963, pp 162, 164-166. JPRS 21328 The Tenth Anniversary of the Rosa Luxemburg Engineering School for Postal Affairs and Tele-Communications, by G. Kalauch, R. Topelt, 7 pp. CERMAN, per, Die Deutsche Post, Vol VIII, No 8, 1963, JPRS 21366 pp 233-236. Increasing Interest in Licensing Transactions With East Germany, 9 pp. GERMAN, per, Presse-Informationen, No 91, 12 Aug 1963, JPRS 21342 p 7. Sales Accounting in an Integrated Steelworks With Special Reference to Electronic Data Processing Plants, by H. Bodewig, G. Schumacher. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 18 Jul 1963, pp 930-939. *BISI 3379 The TG-6 Soviet Variable Gauge Truck, by Fritz Borchert, 5 pp. GERMAN, per, Die Werkstatt, Vol VII, No 8, 1963, JPRS 20287 pp 260, 261.

| Equalization of the Economic Level of the Socialist Countries and Foreign Trade, by Guenter Schade, 17 pp. GERMAN, per, Wirtschaftswissenschaft, No 8, 1963, pp 1237-1251. Development of the Czechoslovak National Economy, by Otacar Mrazek, 9 pp. GERMAN, per, Wirtschaftswissenschaft, No 3, 1963, pp 1302-1312. Seasonal Fluctuations of the East German Industrial Production, 5 pp. GERMAN, per, Wochenbericht, Vol XXX, No 32, 9 Aug 1963, pp 145, 146. Activities of the CSSSHD Member Railroads in 1962, by W. M. Kulagin, 7 pp. GERMAN, per, Z der Organization fuer die Zusammanzbeit der Eisenbahnen, Vol VI, No 3, May-Jun 1963, pp 20, 21. The Role of Councils in the Direction of Domestic Trade, by Imro Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, 1963, pp 570-584. The Role of Mechanization and Automation in Raising Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light- Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 305-311. JPRS 21369 | | | |
|--|---|---|------------|
| by Otacar Mrazek, 9 pp. GERMAN, per, Wirtschaftswissenschaft, No 3, 1963, pp 1302-1312. Seasonal Fluctuations of the East German Industrial Production, 5 pp. GERMAN, per, Wochenbericht, Vol XXX, No 32, 9 Aug 1963, pp 145, 146. Activities of the OSSSHD Member Railroads in 1962, by W. M. Kulagin, 7 pp. GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen, Vol VI, No 3, May-Jun 1963, pp 20, 21. The Role of Councils in the Direction of Domestic Trade, by Imro Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, 1963, pp 570-584. The Role of Mechanization and Automation in Raising Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light-Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | Countries and Foreign Trade, by Guenter Schade, 17 pp. GERMAN, per, Wirtschaftswissenschaft, No 8, 1963, | JPRS 21377 |
| Production, 5 pp. GERNAN, per, Wochenbericht, Vol XXX, No 32, 9 Aug 1963, pp 145, 146. JPRS 21399 Activities of the OSSSHD Member Railroads in 1962, by W. M. Kulagin, 7 pp. GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen, Vol VI, No 3, May-Jun 1963, pp 20, 21. The Role of Councils in the Direction of Domestic Trade, by Imro Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, 1963, pp 570-584. JPRS 21399 The Role of Mechanization and Automation in Raising Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light-Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp. 1 | | by Otacar Mrazek, 9 pp. GERMAN, per, Wirtschaftswissenschaft, No 3, 1963, | JPRS 21377 |
| by W. M. Kulagin, 7 pp. GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen, Vol VI, No 3, May-Jun 1963, pp 20, 21. The Role of Councils in the Direction of Domestic Trade, by Imre Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, 1963, pp 570-584. JPRS 21399 The Role of Mechanization and Automation in Raising Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light- Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | Production, 5 pp. GERMAN, per, Wochenbericht, Vol XXX, No 32, 9 Aug 1963, | JPRS 21399 |
| Trade, by Imre Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, 1963, pp 570-584. The Role of Mechanization and Automation in Raising Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light- Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. JPRS 21369 Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | - | by W. M. Kulagin, 7 pp. GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen, Vol VI, No 3, | JPRS 21340 |
| Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, pp 137-144. Meat and Milk Production, by Lorand Nagy, 10 pp. HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light- Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | Trade, by Imre Foldes, 18 pp. HUNGARIAN, per, Allam es Igazgatas, Vol XIII, No 8, | JPRS 21399 |
| HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, pp 39-47. Experiences in the Experimental Rolling of Light-Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | Productivity in the Food Industry, by Jeno Lugosi, 19 pp. HUNGARIAN, per, Elemezesi Ipar, Vol XVII, No 5, 1963, | JPRS 21341 |
| Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, 1963, pp 294-300. Production Experiences at the Salgotarjan New Cold Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | HUNGARIAN, per, Gazdalkodas, Vol VII, No 3, Jun 1963, | JPRS 21341 |
| Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | | Weight Sections and Problems of Full Scale Production, by Istvan Pokos, 18 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | JPRS 21369 |
| | | Rolling Mill, by Laszlo Urmossy, 16 pp. HUNGARIAN, per, Kohaszati Lapok, Vol XCVI, No 7, | JPRS 21369 |

The Management of Fixed and Circulating Assets and the Use Charge, by Istvan Gergely, 22 pp. HUNGARIAN, per, Kozgazdasagi Szemle, Vol X, No 3, 1963, pp 889-904.

JPRS 21414

| The Evaluation of Expenditures in Calculations of Investment Profitability, by Gabor Revesz, 15 pp. HUNGARIAN, per, Kozgazdasagi Szemle, Vol X, No 8, 1963, pp 905-915. | JPRS 21414 |
|--|------------|
| Production, Joint and Personal Income in the Cooperative Sector, by Ferenc Vagi, 15 pp. HUNGARIAN, per, Statisztikai Szemle, Vol XLI, No 6, 1963, pp 579-593. | JPRS 21341 |
| Achievements and Goals of the Communications Industry in 1963, by Zygmunt Moskwa, 7 pp. POLISH, per, Lacznosc, No 29, 20 Jul 1963, pp 1, 2. | JPRS 21340 |
| Costs of Cooperative Housing Construction, by Maria Jerczynska, 19 pp. POLISH, per, Miasto, No 6, 1963, pp 24-29. | JPRS 20287 |
| Chemical Industry in the National Economy, by Antoni Raklinski, 15 pp. POLISH, per, Nowe Drogi, No 8, 1963, pp 67-79. | JPRS 21362 |
| System of Awards on State Farms, by Zygmunt Zason, 16 pp. POLISH, per, Nowe Rolnictwo, No 13, 1-15 Jul 1963, pp 2-4. | JPRS 21307 |
| Position of Industrial Feed Mixtures in the Nation's Feed Economy, by Witold Mich, 8 pp. POLISH, per, Nowe Rolnictwo, No 13, 1-15 Jul 1963, pp 12, 13. | JPRS 21307 |
| Trends in the Technico-Economic Usage of Reserve Fodders in the Key Potato Industries, by Ireneusz Bakasiak, 10 pp. POLISH, per, Nowe Rolnictwo, No 13, 1-15 Jul 1963, pp 14-16. | JPRS 21307 |
| Management of Materials on Small Scale Production, 42 pp. POLISH, per, Przeglad Drobnej Wytworczosci, No 13, 14, | |
| Jul 1963, pp 7-14. | JPRS 21340 |

| Mining and Electric Power Industry Cooperation With CENA Countries, 9 pp. POLISH, per, Przeglad Gorniczy, No 6, 1963, pp 239-242. | JPRS 21193 |
|--|--|
| Organization of Offices of Technical Growth and Progress in the Ministry of Transportation of the German Democratic Republic, by Tadeusz Godula, 8 pp. POLISH, per, Przeglad Kolejowy Mechaniczny, Vol XV, No 6, 1963, pp 183-196. | JPRS 21328 |
| Foreign Transportation Experimentation, by Jan Marzec, 8 pp. POLISH, per, Przeglad Komunikacyjny, No 2, 1963, pp 60-65. | ACSI I-2949 ID 2240818 525th MI Gp |
| Specialization and Cooperation in the Engineering Industry of CEMA Countries, by Zygmunt Keh, 13 pp. POLISH, per, Przeglad Mechaniczny, No 13, 10 Jul 1963, pp 393-397. | JPRS 21334 |
| Comparison of Economic Effects of Two Methods of Steel Production: Open-Hearth and Oxygen-Converter, by Stanislaw Kawinski, 5 pp. POLISH, per, Przeglad Techniczny, No 30, 28 Jul 1963, pp 3, 6. | JPRS 21257 |
| Increasing the Productivity of Polish Forests, by Tadeusz Molenda, 21 pp. POLISH, per, Sylwan, Vol CVII, No 3, 1963, pp 13-25. | JPRS 21240 |
| Outlook for the Development of Motorization Industry in Poland, by Waclaw Hanyga, 21 pp. POLISH, per, Technika Motoryzacyjna, No 7, 1963, pp 209-216. | JPRS 21210 |
| Economic Statistics for First Half-Year of 1963, 26 pp. POLISH, per, Tribuna Ludu, No 208, 30 Jul 1963, pp 4, 5. | JPRS 21248 |
| Development of the Electrification of Agriculture and Some Statistical Problems, by Julian Jacek, 25 pp. POLISH, per, Wiadomosci Statystyczne, No 3, May-Jun | |
| Comments on the Development of the Electronic and Communications Industry in Poland, by Witold Tyrman, 9 pp. | JPRS 21240 |
| POLISH, per, <u>Wiadomosci Telekomunikacyjne</u> , No 6, 1963, pp 1-8. | JPRS 21366 |

pp 13-23.

The Role and Significance of Communal Agencies in the Development of the Contemporary Village, by Jozef Pawlowski, Piotr Typiak, 19 pp. POLISH, per, Wies Wspolczesna, No 7, 1963, pp 45-53. JPRS 21208 Restrained Freedom -- Economic Planning for 1966-1970, by Stanislaw Markowski, 6 pp. POLISH, np. Zycie Gospodarcze, No 34, 25 Aug 1963, pp 1, 2. JPRS 21399 The Cause of Conflict Between Banks and Enterprises and Possibilities for Resolution, by Jan Walach, POLISH, np. Zycie Gospodarcze, No 34, 25 Aug 1963, pp 1, 5. JPRS 21399 Costly Supervision of Investments, by Zygmunt Saldak, POLISH, np , Zycie Gospodarcze, No 34, 25 Aug 1963, JPRS 21399 p 3. Better Utilization of Metal, by Constantin Tuzu, RUMANIAN, per, Probleme Economice, No 8, 1963, pp 25-38. JPRS 21362 Work Organization at Building Sites, by N. Cucui, RUMANIAN, per, Probleme Economice, Vol XVI, No 8, 1963, pp 50-61. JPRS 21328 Problems of Inter-State Specialization of Agricultural Production in the Socialist Countries, by A. Stupov, V. Storoyev, 10 pp. RUMANIAN, per, Revista Internationala Pentru Agricultura, Vol VII, No 3, May-Jun 1963, pp 9-14. JPRS 21334 Socioeconomic Aspects of Socialist Farm Expansion Via Land Purchases, by Novica Mitic, Melanija Jevdjovic, 26 pp. SERBOCROATIAN, per, Produktivnost, Vol V, No 6, 1963, pp 452-458. JPRS 21307 Diesel Hydraulic Locomotives on the Yugoslav Railroads, by Dimitrije Dimitrijevic, 35 pp. SERBOCROATIAN, per, Zeleznice, Vol XIX, No 7, 1963,

JPRS 21210

Eastern Europe Political

| The Albanian Workers' Party The Organizer, Leader, and Educator of Our Peoples' Army, by Sadik Bekteshi, 11 pp. ALBANIAN, per, Rruga c Partise, Vol X, No 7, 1963, pp 53-63. | JPRS | 21230 |
|--|---------|--------|
| Let Us Increase Our Attention to the Preparation and Organization of Seminars for Secretaries of Basic Party Organizations, by Qetsor Kaltani, Teki Malindi, 9 pp. | | |
| ALBANIAN, per, Rruga e Partise, Vol X, No 8, 1963, pp 43-51. | JPRS | 21230 |
| Marxism Is Not a Dogma But a Manual for Action, 15 pp. BULGARIAN, per, Novo Vreme, No 8, 1963, pp 3-13. | JPRS | 21370 |
| The Question of Ownership of the Land in the TKZs, by Zhivko Strashilov, 12 pp. BULGARIAN, per, Novo Vreme, No 8, 1963, pp 21-23. | JPRS | 21370 |
| Democratic Centralism Organizational Basis of Party and State Leadership, by Todor Kirov, 12 pp. BULGARIAN, per, Novo Vreme, No 8, 1963, pp 61-71. | JPRS | 21370 |
| The First People's Antifascist Uprising, by Ivan Mikhailov, 7 pp. BULGARIAN, np., Rabotnichesko Delo, 18 Sep 1963, p 2. | JPRS | 21370 |
| SED Extremists Rebel Against Ulbricht, by Henning Frank, 7 pp. WEST GERMAN, np, Christ und Welt, 30 Aug 1963, p.5. | JPRS | 21192 |
| Walter Ulbricht's Speech at East German Youth Rally, by Walter Ulbricht, 28 pp. GERMAN, np, Neues Deutschland, 26, 27 Sep 1963. | ז מ מ מ | 21393 |
| Self-Assured Tones From Bucharest, by Alexander Korab, | JFNO | C 1323 |
| 5 pp. WEST GERMAN, np. Der Tagesspiegel, 27 Aug 1963, p 3. | JPRS | 21192 |

Eastern Europe Political (Contd)

1963, pp 54-63.

Steel, Flies and Socialism, by Ignacy Sachs, 13 pp. POLISH, per, Nowe Drogi, No 8, 1963, pp 117-127.

JPRS 21370

Sixty Years Since the Second Congress of the Social-Democratic Workers' Party in Russia, by Grigore Comartin, 13 pp.
RUMANIAN, per, Lupta de Clasa, Vol XLIII, No 7,

JPRS 21254

Autarky or Socialist Cooperation, by Alexander Dubcek, 5 pp.
RUSSIAN, np, Izvestiya, 7 Sep 1963, p 2.

JPRS 21254

Military

Changes in Clothing, by I. Tomic. CROATIAN, np, Marodna Armija, 19 Apr 1963, p 4.

*ACSI I-3349 ID 2246288 525th MI Gp

Individual Protection Against Chemical Warfare Agents, by Dako Barac, 8 pp. CROATIAN, pcr. Vojni Glasnik, No 5, 1962, pp 20-26.

ACSI I-8005-A ID 2216542

Action of Atomic Weapons and Importance of Road Columns, by Vladimir Timchenko, 5 pp. CROATIAN, per, Vojni Glasnik, No 5, 1963, pp 35-38.

ACSI I-8005-B ID 2216542

From the History of the Polish Army 1945-1948, by Ignacy Blum, 34 pp. CZECH, per, Historie a Vojenstvi, No 2, Apr 1963, pp 153-181.

JPRS 21196

Prevention of World Thermonuclear War -- The Most Pressing Task, by Frantisek Havlicek, 15 pp. CZECH, np, Rude Pravo, 11 Sep 1963.

JPRS 21370

High Command of the German Army, Test Corps and Army Artillery - Warlike, Tactical Bombardment of the Steel Concrete Armored Fortification Works of Fort de Battice and Fort Neufchateau With the Following Ordance -21 cm Ro-Gr 42 and 44 Be and 34 cm and 35 cm Ro-Gr 42 Be.

GERMAN, rpt, Kriegsmassiger Beschuss gegen Stahlbeton-Panzerwerke der Befestigungsgruppen von Fort de Battice and Fort Neufchateau mit 21 cm Ro-Gr 42 und 44 Be und 34 cm und 35 cm Ro-Gr 42 Be, 1943.

*AEC

Eastern Europe Military (Contd)

| manufacture (Constant) | |
|--|---|
| The Future of Manned Military Aircraft. GERMAN, per, Flugwelt, Vol VI, 1963, pp 466-475. | *Navy/ONI |
| Modern Photographic Reconnaissance. GERMAN, per, Flugwelt, Vol VI, 1963, pp 482-489. | *Navy/ONI |
| Tanks on Parachutes, by Hausdorf. GERMAN, np, Die Volksarmee, No 24, 1963, p 8. | *ACSI I-3483 ID 2246305 525th MI Gp |
| National Territorial Defense in Coast Regions, by Edward Tepczynski, 9 pp. POLISH, per, Przeglad Morski, No 7, 8, 1963, pp 25-32. | JPRS 21196 |
| Regional Antiaircraft Defense at an Ocean Base, by Tadeusz Miziorko, 7 pp. POLISH, per, Przeglad Morski, No 7, 8, 1963, pp 33-36. | JPRS 21196 |
| Current Problems in Troop Training, by Piotr Marciniszyn, 7 pp. POLISH, np, Zolnierz Wolnosci, 21 Aug 1963, pp 1, 3. | JPRS 21196 |
| On Guard in the Air: Anti-Aircraft Rockets and Supersonic Fighters, by T. Zubowicz, 5 pp. POLISH, np, Zolnierz Wolnosci, 25 Aug 1963, pp 3, 7. | JPRS 21196 |
| Operation Lancet: The Military Medical Academy in the Field, by Jerzy Michalik, 5 pp. POLISH, np, Zolnierz Wolnosci, No 202, 29 Aug 1963, pp 1, 2. | JPRS 21213 |
| Commissioners for Fire Prevention Control, 5 pp. RUMANIAN, per, Paza Contra, No 7, 1963, pp 1, 2. | JPRS 21213 |
| Geographic | |
| Geomorphological Studies of the Danubian Hilly Plane Between the Vidbol and Ogosta Rivers, by K. Mishev, 58 pp. BULGARIAN, per, Izvestiya na Geografskiya Institut. Vol IV, 1959, pp. 27-76. | ACSI I-3138 ID 2240849 |
| Notes on the Geomorphology of the Rumanian Black Sea Coast, by Yon Rudulesku, 7 pp. BULGARIAN, per, <u>Izvestiya na Geografskiya Institut</u> . Vol V, 1961, pp. 27-33. | ACSI I-3137 ID 2240848 |

Eastern Europe Sociological

| The Training of Cadres An Important Duty for the Reorganized Schools, by Thoma Deliana, 12 pp. ALBANIAN, per, Rruga e Partise, Vol X, No 7, 1963, pp 14-24. | JPRS 21230 |
|---|---------------------------|
| Telephone Directory, 459 pp. BULGARIAN, bk, <u>Ukazatel na Telefonnite Abonati</u> , Sofiya, 1961, pp 1-140. | ACSI I-2985 ID 2240823 |
| Communist Education of Youth Must Be Improved Decisively, by Gancho Ganev, 25 pp. BULGARIAN, per, Narodna Prosveta, No 7, 1963, pp 3-22. | JPRS 21184 |
| Education of Younger Students in Atheism, by Mariya Kuncheva, 8 pp. BULGARIAN, per, Narodna Prosveta, No 7, 1963, pp. 38-43. | JPRS 21184 |
| Survey of School and Educational Problems, 17 pp. CROATIAN, per, Prosevetna Dokumenticija, No 3, 4, 1963, pp 7-19. | JPRS 21401 |
| Compensation for Losses to Social Insurance Funds, by Milan Prelic, 23 pp. CROATIAN, per, Socijalna Poltika, No 5, 1963, pp 491-509. | JPRS 21184 |
| Living Costs of Worker and Employee Families 1957-1962, by M. Popovic, 8 pp. CROATIAN, per, Socijalna Politika, No 5, 1963, pp 528-533. | JPRS 21184 |
| The System and Payments of Social Security in Soviet Zone, by Karl Hauck, 6 pp. WEST GERMAN, per, SBZ Archiv, No 14, Jul 1963, pp 219, 220. | JPRS 21184 |
| Problems in Training Workers, Technicians, and Masters, 8 pp. RUMANIAN, per, Invatamintul Profesional si Technic, No 2, 1963, pp 1-5. | JPRS 21184 |
| Higher Education and Practical Demands, by Stefan Balan, 14 pp. RUMANIAN, per, Lupta de Clasa, No 7, 1963, pp 14-26. | JPRS 21401 |
| An Analysis of Inspection Activity in the Field of Labor Safety, 5 pp. RUMANIAN, per, Muncitorul Sanitar, Vol XIV, No 29, 20 Jul 1963, p 3. | JPRS 21383 |

WESTERN EUROPE

*ACSI 1-3542 ID 2250284

Economic

Selected Articles From the Danish Book Kobenhavens Kommunalkalender, 1961.

| A. Copenhagen's Gas and Electric Service, (pp 245-257). | |
|---|------------|
| B. Copenhagen's Water Supply, (pp 262-266). | |
| C. Copenhagen Railroads, (pp 268-270, 272). | |
| E. Copenhagen Municipality Department of Trades, (pp 276, 277). | |
| Political | |
| Danish Communists Attack China's Stand on Test Ban, Call for Resolving Differences With Yugoslavia, 8 pp. DANISH, np. Land og Folk, 18 Aug 1963, p 2. | JPRS 21167 |
| Jespersen Tells Danes USSR Offers Scandinavia Security Guarantee in Return for Neutrality, by Knud Jespersen, 5 pp. DANISH, np, Land og Folk, 22 Aug 1963, p 2. | JPRS 21167 |
| Danish Communists Side with USSR on Coexistence Issue, Praise Soviet Protest Against Chiang Aide's Signing US Copy of Test Ban Treaty, 6 pp. DANISH, np, Land of Folk, 8 Sep 1963, p 2. | JPRS 21325 |
| Things Are Stirring Even in the Netherlands Communist Party, 8 pp. DUTCH, per, de Brung, No 3, 17 Aug 1963, pp 6-8. | JPRS 21433 |
| The Shortest Road to Socialism, by Armas Aikia, 5 pp. FINNISH, np, Kansan Uutieset, 23 Aug 1963, p 4. | JPRS 21229 |
| Finnish Communist Party Claims to Back the USSR All the Way, 6 pp. FINNISH, per, Kommunisti, Vol XIX, No 7, 1963, pp 252-255. | JPRS 21203 |
| Unity of Action and Prospects for Unity, by Camille Vallin, 13 pp. FRENCH, per, Cahiers du Communisme, No 9, 1963, pp 15-30. | JPRS 21433 |

Western Europe Political (Contd)

| War of Peace? Answers to Readers' Questions, 10 pp. FRENCH, np, le Drapeau Rouge, 14 Sep 1963, pp 4, 5. | JPRS 21433 |
|---|------------|
| Burnelle's Report to the Central Committee of the Belgian Communist Party 14 September 1963, by Ernest Burnelle', 15 pp. | |
| FRENCH, np, 1e Drapeau Rouge, 19 Sep 1963, pp 3, 4. | JPRS 21386 |
| French Communist Weekly Criticizes Chinese Opposition to the Test Ban Treaty, by Flori Onte, 7 pp. FRENCH, np, France Nouvelle, No 934, 11-17 Sep 1963, pp 18, 19. | JPRS 21229 |
| Struggle for the Correct Line of the International Communist Movement, by Jeannette Vermeersch, 8 pp. FRENCH, np, 1*Humanite, 14 Sep 1963, pp 1-3. | JPRS 21433 |
| Statement by the Swiss Labor Party, 13 pp. FRENCH, np, Voix Ouvriere, 17 Sep 1963, pp 4, 5. | JPRS 21433 |
| Austria and the International Communist Dispute Fuernberg's Report to the Central Committee of the Austrian Communist Party, 22 August, by Friedl Fuernberg's, 38 pp. GERMAN, np, Volksstimme, 23 Aug 1963. | JPRS 21229 |
| Personal Property in Socialism and in Communism, by Jefim Manewitsch, 5 pp. WEST GERMAN, np, Zeitung Vum Letzeburger Vollek, Vol XVIII, No 193, 24 Aug 1963, p 7. | JPRS 21253 |
| Luxemburg Communist Organ Chides China for Rejecting the Test Ban Treaty, by Georg Hansen, 11 pp. WEST GERMAN, np. Zeitung Vum Letzeburger Vollek, No 203, 6 Sep 1963, p 8. | JPRS 21325 |
| Togliatti, China, and the Socialists, 7 pp. ITALIAN, np, Avanti, 31 Aug 1963, pp 1, 8. | JPRS 21253 |
| Communist Desertion of Reality, by Franco Gerardi, | |
| 5 pp. ITALIAN, np, <u>Avanti</u> , 17 Sep 1963, p 1. | JPRS 21253 |
| The Communists of the Eighties, by Luciano Vasconi, | |
| 19 pp. ITALIAN, per, Mondo Operaio, No 6, 1963, pp 19-28. | JPRS 21253 |

Western Europe Political (Contd)

P. Vaulont, 20 pp.

| Political (Contd) | |
|---|---|
| Selected Articles From the Italian Periodical Rinascita. | JPRS 21253 |
| 24 Aug 1963. On the Atomic Test Ban Agreement, by Palmiro Togliatti, 5 pp, (pp 1, 2). | · |
| The Communist Party in the Large Cities, by Paolo Bufalini, 6 pp, (pp 19, 20). | |
| 31 Aug 1963, pp 1, 2. Against Dogmatism For a Marxist Policy, by Palmiro Togliatti, 5 pp. | |
| 7 Sep 1963, pp 25, 26. Sartre on Peaceful Coexistence and Confrontation of Ideas, by Sartre, 12 pp. | |
| Swedish Communist Leader Hagberg Criticizes China on the Peace Question, by Hilding Hagberg, 5 pp. SWEDISH, np, Ny Dag, No 503, 3 Sep 1963. | JPRS 21229 |
| Hilding Hagberg: Socialism Victorious in Peaceful Competition, by Hilding Hagberg, 5 pp. SWEDISH, np, Ny Dag, 9 Sep 1963, pp 2, 5. | JPRS 21229 |
| Military | |
| Orientation on Civil Defense, 33 pp. DANISH, rpt, Orientering om Civilforsvaret, 1961, pp 3-47. | ACSI I-3236 ID 2244415 |
| Civil Defense - Evolution of a Concept. FRENCH, per, Protection Civile et Industriella, No 108, Jun 1963, pp 7-10. | *ACSI I-3379 ID 2246299 |
| An Apparatus for Throwing Loads Out of Planes. GERMAN, per, Soldat und Technik, No 2, 1963, p 104. | *ACSI I-3352 ID 2246291 525th MI Gp |
| Fire Lanes, Fire Susceptibility, and i-Plans of Built-Up and Populated Zones in Civil Defense, by | |

GERMAN, per, Vereinigung zur Foerderung des
Deutschen Brandschutzwesens Zeitschrift. Forschung
und Technik im Brandschutz, Vol XII, No 2, May 1963,
pp 44-58.

ACSI I-2987
ID 2240825

Western Europe Geographic

Locality of Nykobing, 5 pp.
DANISH, rpt, Danmark, Vol V, 1961, pp 493-495,
501, 503, 504, 506.

ACSI I-3211-B ID 2244406

Sociological

The Cartage Department of Copenhagen Municipality. DANISH, rpt, Kobenhavens Kommunalkalender, 1961, pp 275, 276.

*ACSI I-3542-D ID 2250284

AFRICA

Economic

Economic Planning in Algeria, 7 pp.
FRENCH, per, Atlas Algerie, No 18, 2-8 Aug 1963, pp 17-21.

JPRS 21161

Social Restraints on Agriculture in Morocco, by Paul Pascon, 18 pp.

FRENCI, np, La Vie Economique, 12, 19, 26 Jul2 Aug 1963, p 3.

JPRS 21247

Political

Algerian Leftist Daily Views Country's Constitutional Problems, 6 pp.
FRENCH, np, Alger Republicain, Vol XXVI, No 335-336, 17-20 Aug 1963, pp 1, 2.

JPRS 21161

Observations on President Ben Bella's Speech to the Student Congress, by Bachir Hadj Ali, 11 pp. FRENCI, np, Alger Republican, 27 Aug 1963, p 4.

JPRS 21247

MIDDLE EAST

Political

Iraqi Communist Party Sides With Moscow in Sino-Soviet Dispute, 6 pp. ARABIC, np. Beirut al Akhbar, 11 Aug 1963, p 5.

JPRS 21433

Lesson of the Rehovot Conference, by David Lipkin, 5 pp. HEBREW, np, Davar, 12 Sep 1963, p 6.

JPRS 21416

Military

The Army's Young Officers, by Zeev, Shif, 11 pp. HEBREW, np, Haarets, 18 Sep 1963, pp 3-15.

JPRS 21416

Blocking of Carrier Means War, by 'Ami Shamir, 8 pp. HEBREW, np, Lamerhav, 18 Sep 1963, p 13.

JPRS 21416

FAR EAST

Economic

Selected Articles From the Chinese Periodical Ching-chi Yen-chiu.

No 8, 17 Aug 1963.

JPRS 21447

Preliminary Discussion on Strict Application of Economic Accounting in State-Owned Industrial Enterprises, by Kuang Jih-an, 24 pp, (pp 1-9).

Comment on Forms of Expanded Reproduction in Socialist Agriculture, by Liu Shih-pai, Chai Yung, 23 pp. (pp 10-20).

Problems Concerning Index Systems for Evaluation of Economic Results in Agriculture, by Ts'eng Ch'i, 30 pp, (pp 20-30).

Some Views on the Nature and Spirit of the Overall Guidelines for the Development of National Economy, by Yang Chien-pai, 48 pp, (pp 31-42).

Several Problems Concerning Profits in the Formation of Prices of Industrial Products, by Yang Hung-tao, 27 pp, (pp 43-49, 66).

Comment on the Use of Unchanged Product Prices, by Ho Chiang, 14 pp, (pp 50-54).

Selected Articles From the Chinese Newspaper Jen-min Jih-pao.

26 Aug 1963, p 2. Suggesting Several Technical Measures to Raise Next Year's Cotton Output, 8 pp. JPRS 21361

27 Aug 1963, p 1. Intensified Fall Management of Fields in Three East China Provinces, 6 pp. JPRS 21361

Far East Economic (Contd)

Selected Articles From the Chinese Newspaper Jen-min Jih-pao. (Contd)

| 29 Aug 1963, p 5. Water Conservancy & Agricultural Production, by Chang Tzu-lin, 11 pp. | JPRS 21397 |
|---|------------|
| 3 Sep 1963, p 2. The Picking of Early Cotton and Strengthening of Subsequent Cotton Farm Management, 8 pp. | JPRS 21365 |
| 4 Sep 1963, p 1. Rice Harvest is Good in Hupeh and Szechwan, 5 pp. | JPRS 21456 |
| Comprehensive and Combined Development of Agriculture, by Yang T'ing-hsiu, 9 pp. CHINESE, np, Kuang-ming Jih-pao, 29 Aug 1963, p 2. | JPRS 21361 |
| Accelerated Construction of Important Industrial Projects, 10 pp. CHINESE, np, Kuang-ming Jih-pao, 2 Sep 1963, p 4. | JPRS 21365 |
| Talk About Farm Welders, by Chou Min-hui, 5 pp. CHINESE, per, Shanghai Chi-hsieh, No 3, 25 Mar 1963, pp 10-12. | JPRS 21440 |
| Actively Organize Financial Income, Responsibly Accumulate Capital for the State, by Tsou Ming, 8 pp. CHINESE, np, Ta Kung Pao, 8 Aug 1963, p 2. | JPRS 21186 |
| On the Functions of and Relations Between the Three Channels Through Which Socialist Commodities Flow, by Asu Ho-ching, 8 pp. CHINESE, np, Ta Kung Pao, 20 Aug 1963, p 3. | JPRS 21186 |
| On Certain Problems of Safety in the Design of Reinforced Concrete Structures, by Chang Shen-yu, Ch'en Yu-ch'eng, 19 pp. | |
| CHINESE, per, T'u-mu Kung-ch'eng Hsueh-pao, No 1, 1963, pp 32-36. | JPRS 21166 |
| The Silt Problem of China's Rivers, by Ch'ien Ning, 14 pp. CIINESE, np, Wen-hui Pao, 30 Jun 1963, p 3. | JPRS 21456 |
| Chinese Trade Unions, 66 pp. PRENCI, bk, Les Syndicats Chinois, 1961, pp 1-60. | JPRS 21209 |
| Tractors Are Essential to Expansion of Cambodian Agriculture, 5 pp. FRENCH, np, Realites Cambodgiennes, No 367, 9 Aug 1963, pp 8, 9. | JPRS 21288 |

Far East
Economic (Contd)

| Korean Interim Balance, 19 pp. GERMAN, np, Neue Zuercher Zeitung, 17, 18 Aug 1963. | JPRS | 21427 |
|---|------|-------|
| Light Industry Centers in North Korea, 7 pp. KOREAN, per, Kyongje Chisik, No 5, 1963, pp 37-40. | JPRS | 20779 |
| Selected Articles From the Mongolian Periodical Namyn Am'dral, No 6, 1963. | JPRS | 21227 |
| A Better Use of Fixed and Revolving Capital of Agricultural Production Enterprises, by A. Tsagaanhuu, 10 pp, (pp 7-11). | | |
| Mutual Contracts Must Play a More Important Role in the Fulfillment of Plans of Business and Industrial Enterprises, by J. Byambadorj, 12 pp, (pp 15-22). | | |
| How the Annual Work of Primary Party Cells and Committees Should Be Planned, 23 pp, (pp 44-51). | | |
| Work Norms and Wages at Collective and State Farms, 15 pp, (pp 72-79). | | |
| Water Economy Problems in China, by Janusz Grouchulski, 13 pp. POLISH, per, Gospodarka Wodna, Vol XXIII, No 7, 1963, pp 245-250. | JPRS | 21456 |
| Some Views Concerning Our Present Foodstuff Problem, by Vu Quang Tiet, 7 pp. VIETNAMESE, per, Hoc Tap, No 8, 1963. | JPRS | 21202 |
| The Management of Technical Materials Supply in Socialist Industrialization, by Le Hoanh, 24 pp. VIETNAMESE, per, Hoc Tap, No 8, 1963, pp 16-23. | JPRS | 21202 |
| Selected Articles From the Vietnamese Newspaper Nhan Dan. | | |
| 24 Jul 1963, p 2. Reserving Additional Land for Livestock Feed Crops, 5 pp. | JPRS | 21217 |
| 25 Jul 1963, p 1. Strive for Fulfillment of Industrial Production Plan in Second Half of 1963, 5 pp. | JPRS | 21217 |
| 30 Jul 1963, p 3. Commerce in Support of Production, 19 pp. | JPRS | 21217 |

Far East Economic (Contd)

| Selected Articles From the Vietnamese Newspaper Nhan Dan. (Contd) | |
|---|------------|
| 31 Jul 1963, p 3. Hanoi Invests in Basic Construction, by Hoang-Minh, 5 pp. | JPRS 21217 |
| Aug 1963, pp 24-31. Let Us Improve Monetary and Credit Management, by Tran Duong, 13 pp. | JPRS 21202 |
| 6 Aug 1963, p 3. A Work Camp Serves as a Test Case, by Ha Mau, 7 pp. | JPRS 21439 |
| Correctly Understanding the Problem of Improving the Standard of Living, by Canh Sinh, 9 pp. | |
| 7 Aug 1963, p 3. The Polytechnic Institute Work Camp Consistently Exceeds Its Goals, by Hoang Minh, 6 pp. | JPRS 21439 |
| & Aug 1963, p 3. Foodstuffs Branch Carries Out Three-Constructive, Three-Destructive Campaign, by Dang Van Thien, 7 pp. | JPRS 21439 |
| 10-12 Aug 1963, pp 2-4. Change Our Thinking and Organization in Economic- Financial Management Work, by Le Thanh Nghi, 38 pp. | JPRS 21439 |
| 11 Aug 1963, p 2. To Improve Transportation and Water Resources Equipment, 6 pp. | JPRS 21308 |
| 12 Aug 1963, p 3. Early Completion of Commendations for Revolutionary Meritorious Services, 9 pp. | JPRS 21303 |
| 13 Aug 1963, p 3. To Have a Firm Command of the Food Stabilization Policy, by Tran Van Hien, 5 pp. | JPRS 21303 |
| 5 Sep 1963, p 3. Creating a Revolutionary Change Toward Improving Technology, by Anh Vu, 6 pp. | JPRS 21308 |
| | |

Far East Political

Index of Official Announcements, 1961 and 1962, of the Standing Committee of the National People's Congress, People's Republic of China, 7 pp. CHINESE, per, Ch'uan-kuo Jen-min Tai-piao Ta-hui Ch'ang-wu Wei-yuan-hui Kung-pao So-vin, No 58-69, pp 1-7.

JPRS 21372

Regulations on the Organization of the People's Congress and People's Council of Li-chiang Nahsi Autonomous Hsien, Yunnan, 15 pp. CHINESE, per, Chung-hua Jen-min Kung-ho-kuo Ch'ang-wu Wei-yuan-hui Kung-pao, No 5, 28 Dec 1962, pp 8-13.

JPRS 21339

The Western Chou Dynasty as Viewed From Hsi-shuang Pan-na, by Ma Yao, Miao Luan-ho, 9 pp. CHINESE, per, <u>Hsueh-shu Yen-chiu</u>, No 1, 15 Jan 1963, pp 1-3.

JPRS 21339

Selected Articles From the Chinese Periodical Hung-ch'i.

No 15, 1 Aug 1963. Conduct Animated Ideological Education With the Thought of Mao Tse-tung as the Pointer, by Hsiao Hua, 24 pp, (pp 14-23). JPRS 21223

Study Marx's Theory of Reproduction, by Kao Cheng-sheng, 16 pp. (pp 24-32).

On the Contradictions of Performers, by Shu Ch'iang, 32 pp, (pp 33-41).

No 18, 13 Sep 1963. On the Question of Stalin, 15 pp, (pp 1-12).

JPRS 21374

Behind Nehru's Anti-Chinese Policy, by Hsu Ching-lin, 34 pp, (pp 13-24).

Under-Developed Economics is the New Colonialist Theory, by Huang Chan-p'eng, 6 pp, (pp 25-29).

Enhance the Combat Strength of the Rural Basic Level Party Organization, by Wei Wen-po, 17 pp, (pp 30-41).

The Chinese Dossier Against Khrushchev, by Claude Cadart, 9 pp.
FRENCH, np, France Observateur, Vol XIV, 19 Sep 1963, pp 10, 11.

JPRS 21433

Far East Political (Contd)

| Revisionists and the Chinese, by Wolfgang Oberleitner, 7 pp. GERMAN, np, Die Presse, 20 Aug 1963, p 3. | JPRS 21192 |
|--|------------|
| The state of the s | |
| Ten Years of Armistice in Korea, 10 pp. GERMAN, np, Neue Zuercher Zeitung, 20 Aug 1963, p 3. | JPRS 21427 |
| Schism or Compromise? On the Chinese-Soviet Conference in Moscow, by Hans Genthin, 5 pp. GERMAN, np, Vorwaerts, No 29, 1963, p 1. | JPRS 20744 |
| The Four-Year Plan of the Communist Party of Indonesia, by Rewang, 6 pp. INDONESIAN, np, Harian Rakjat, 12 Aug 1963, p 3. | JPRS 21195 |
| Communist China's Basic Viewpoints and Attitudes Prior to Sino-Soviet Talks, 23 pp. JAPANESE, per, Soken Sokuho, 5 Jun 1963, pp 2-23. | JPRS 21152 |
| | |
| On Genuine Patriotism and Proletarian Internationalism, | |
| by Hung Son, 9 pp. VIETNAMESE, per, Hoc Tap, No 8, 1963. | JPRS 21253 |
| Positive Leadership, by Le Trung Viet, 11 pp. VIETNAMESE, per, Hoc Tap, No 8, 1963, pp 41-45. | JPRS 21202 |
| Art and Ideology, by Hong Chuong, 14 pp. VIETNAMESE, per, Hoc Tap, No 8, 1963, pp 46-50. | JPRS 21202 |
| Military | |
| Japanese Military Administration in Indonesia, 687 pp. | |
| JAPANESE, bk, Indonesia ni Okeru Nihon Gunsei no Kenkyu, 31 May 1959, pp 1-630. | JPRS 21359 |
| Selected Articles From the Vietnamese Periodical Hoc Tap. | |
| No 8, 1963, pp 36-40. Some Experiences in the Formation of the Self Defense Corps and the Reserve Force in Ha Nam Province, by Tran Do, 12 pp. | JPRS 21202 |
| No 9, 1963. A Number of Problems Concerning the Vietnamese August Revolution, by Truong Chinh, 14 pp. | JPRS 21467 |

Far East Military (Contd)

Selected Articles From the Vietnamese Periodical Hoc Tap. (Contd)

No 9, 1963. Hold High Nuclear Weapon Ban Flag and Direct Struggle Spearhead Against U. S. Imperialists, 7 pp.

Men and Weapons, by Hoang Van Thai, 8 pp.

Peace of Violence, by Hong Chuong, 17 pp.

Geographic

Studies on the Blocking Situations of the Northern Hemisphere-Winter Season, by T'ao Shih-yen, Yang Chien-ch'u, et al, 168 pp.
CHINESE, bk, Pei-pan-ch'iu Tung-chi Tsu-sai Hsing-shih-ti Yen-chiu, Chapters I-IV, May 1962, pp 1-135.

Lung-shan Hsien, A Beautiful Mountain Region, by T-ien Ching-kuei, 6 pp. CHINESE, per, Min-tsu Hua-pao, No 7, 1963, pp 8-12.

The Turfan Basin, by Li Chung-k'uei, 5 pp. CHINESE, per, Min-tsu Hua-pao, No 8, 1963, pp 25, 26.

New Cambodian City of Kirirom Is Born, by P. Fuchs, 7 pp. FRENCH, np, Realites Cambodgiennes, No 365, 26 Jul 1963, pp 6, 7.

Sociological

Serve the People as Wholeheartedly as Did Wu Hsing-ch'un, by Lo Jui-ch'ing, 10 pp. CHINESE, per, Chung-kuo Ch'ing-nien, No 17, 1 Sep 1963, pp 2, 3.

Premier Chou's Talk With a Couple on Planned Parenthood, by Wang Po-ching, 6 pp. CHINESE, per, Chung'kuo Ch'ing-nien, No 17, 1 Sep 1963, p 15.

The P'u-mi Nationality, by Wang En-ch'ing, 6 pp. CHINESE, per, Min-tsu Hua-pao, No 5, 1963, pp 23, 24.

JPRS 21455

JPRS 21467

ACSI I-2849

ID 2237292

JPRS 21463

JPRS 21463

JPRS 21288

JPRS 21455

JPRS 21463

- 36 -

Far East Sociological (Contd)

| The Thai in Ta-lo, by Hao Chun-i, 5 pp. CHINESE, per, Min-tsu Hua-pao, No 6, 1963, pp 24-27. | JPRS | 21463 |
|--|------|-------|
| The Tajik Nationality, 5 pp. CHINESE, per, Min-tsu Hua-pao, No 8, 1963, pp 22-24. | JPRS | 21463 |
| Current Problems in Telegraphic Phonetization (I), by Lei Chien, 12 pp. CHINESE, per, Wen-tzu Kai-ko, No 5, 20 May 1963, pp 1-5. | JPRS | 21372 |
| Current Problems in Telegraphic Phonetization (II), by Lei Chien, 10 pp. CHINESE, per, Wen-tzu Kai-ko, No 6, 20 Jun 1963, pp 7-9. | JPRS | 21372 |
| Humanite Examines Red Chinese Leaders' Attitude Toward Personality Cult, by Jeannette Vermeersch, 5 pp. FRENCH, np, 1'Humanite, No 37, 59, 28 Sep 1963, pp 1, 3. | JPRS | 21452 |
| Historical Roots of Sino-Soviet Conflict, by Michel Lequenne, 5 pp. FRENCH, np, Tribune Socialiste, No 162, 28 Sep 1963, p 4. | JPRS | 21452 |
| Integration of the National Press of Indonesia With the People, by M. H. Lukman. 11 pp. INDONESIAN, np, Harian Rakjat, 16 Aug 1963, p 5. | JPRS | 21195 |
| Living Conditions of the Repatriated in North Korea, by O Kwi-song, 57 pp. JAPANESE, bk, Rakuen no Yume Yaburete, No 3, 1962, pp 13-82. | JPRS | 21260 |
| The Indestructible Unity of the Party and the People, 8 pp. MONGOLIAN, per, Namyn Am'dral, No 6, 1963, pp 3-6. | JPRS | 21227 |
| Builders of a New Education, by Pham-thanh, 8 pp. VIETNAMESE, np, Nhan Dan, 30 Aug 1963, p 3. | JPRS | 21303 |

LATIN AMERICA

Economic

Cuban-Soviet Trade Data, 13 pp.

SPANISH, np, Hoy, 8 Sep 1963, p 7.

Industrial Information on Cuba, 10 pp.

SPANISH, per, Nuestra Industria, No 1-3, 5, 6,

1963, pp 3-15, 50, 51, 55, 56.

JPRS 21407

Organization Goals of the Cuban State, by
J. Vazquez Mendez, 16 pp.
SPANISH, per, Trimestre, Jan-Mar 1963, pp 5-14.

JPRS 21484

Political

Brazilian Communist Party Chief Prestes on Brazilian
Communists and the International Communist Dispute,
by Luiz Carlos Prestes, 7 pp.
PORTUGUESE, np, Novos Rumos, 26 Jul-1 Aug 1963, pp 2, 3. JPRS 21203

Uruguayan Socialist Weekly Analyzes the Causes and Effects of the Dispute, 11 pp.
SPANISH, np, Marcha, No 1169, 1170, 16, 23 Aug 1963, p 5.

JPRS 21167

The National Liberation Movement and Presidential
Succession in Mexico, by Alonso Aguilar, 43 pp.
SPANISH, per, Politica, No 80, 15 Aug 1963, pp 1-16.

JPRS 21411

Che Guevara Has Talk With Visiting Latin Americans, by Jose Vazquez, 8 pp. SPANISH, np, Revolucion, 21 Aug 1963, pp 1, 5. JPRS 21174

Selected Articles From the Spanish Newspaper El Siglo.

20 Aug 1963, pp 4, 5.

Chilean Communists Criticize Chinese Stand on
Coexistence and Emerging Nations: Reflections on
Marxism, by Toro H. Alejandro, 5 pp.

22 Aug 1963, pp 4-7.

Chilean Communists Criticize Chinese Stand on
Coexistence and Emerging Nations: Peaceful
Coexistence and the Liberation Struggle, by
Jorge Montes, 5 pp.

Latin America Political (Contd)

Selected Articles From the Spanish Newspaper El Siglo. (Contd)

24 Aug 1963, p 4. Chilean Communists Criticize Chinese Stand on Coexistence and Emerging Nations: Socialist Countries and National Liberation Movements, by Jose Cademartori, 5 pp.

22 Sep 1963, p 16.
The Chilean Communist Party and the Sino-Soviet Dispute, by Bernardo Araya Zuleta, 9 pp.

Military

Regulations Governing Uniforms and Insignia for Army Personnel, 125 pp.

SPANISH, rpt, Reglamento de Uniformes, Distintivos e Insignias para el Personal del Ejercito, Bogota, 1951, 237 pp, Encl No 5, to Encl No 2 of C-20-63, OUSARMA, Colombia.

SCIENTIFIC

Aerospace

Aviation Physical Metallurgy, Aviation Metal Science Textbook, by S. M. Vinarov, 291 pp. RUSSIAN, bk, Aviatsionnoye Metallovedeniye Uchebnoye Posobiye, Ministerstvo Vysshego i Srednego Spetsial nogo Obrazovaniya RFSR, Moscow, 1962, pp 1-220. 9687073-V

Meteorological Investigations With Rockets and Satellites, by K. Ya. Kondrat'yev, 284 pp. RUSSIAN, bk, Meteorologicheskiye Issledovaniya s Pomoshch'yu Raket i Sputnikov, Leningrad, 1962, 252 pp. 9212925

Rockets and Interplanetary Flights, by B. V. Lyapunov, 139 pp.
RUSSIAN, bk, Rakety i Mezhplanetiyye Polety, Moscow, 1962, pp 1-122. 9670303

Self-Guided Air Rocket R-3S, 310A, Brief Technical Description and Operational Instructions. RUSSIAN, rpt, Samonavodyashchayasya Aviatsionnaya Raketa R-3S 360A, Kratkoye Tekhnicheskoye Opisaniye i Instruktsiya po Ekspluatatsii.

*FTD-TT-63-974

FTD-TT-62-1678

NASA TT F-115

FTD-TT-63-210

JPRS 21203

JPRS 21411

ACSI I-3237

ID 2244416

Scientific Aerospace (Contd)

9685409

In the Air Hovers a Cat, Weightlessness Experiments, by L. Kitayev-Smyk, 8 pp.
RUSSIAN, per, Nauka i Zhizn, No 4, 1963, pp 35-39.

FTD-TT-63-618

New Phase in Investigating the Cosmos, by L. Sedov, 6 pp.

PISSIAN. np. Prayda. No. 229, 17 Aug 1962, p. 2.

RUSSIAN, np, <u>Pravda</u>, No 229, 17 Aug 1962, p 2. 9670287

FTD-TT-63-676

Photoelectric Self-Recording Day-Sky Photometer and Indicatrix of the Scattering of Light in the Earth's Atmosphere, Including Small Angles of Scattering, by V. Ye. Pavlov, 5 pp.

PRESSIAN non Truck At New March SSR Astrofic Inst.

RUSSIAN, per, Trudy Ak Nauk Kazakh SSR Astrofiz Inst, Vol III, 1962, pp 62-65. 9670095

AID Rpt T-63-104

High-Altitude Probing of the Atmosphere on the IL-28 Airplane, 16 pp.

RUSSIAN, per, Trudy Tsentral Aerolog Observ, Moscow, No 43, 1962, pp 47-56. 9669950

FTD-TT-63-534

Aeroelasticity Symposium, Gottingen, 16, 17 April 1957. GERMAN, bk, Max-Planck-Institut fur Stromungsforschung und Aerodynamische Versuchsanstalt, No 18, 1958. 9213212

NASA TT F-81

Numerical Representation of Plane and Rotationally Symmetric Transonic Jet Flow With Curved Sound Boundary, by E. Martensen, K. von Sengbusch, 121 pp. GERMAN, per, Mitteilungen aus dem Max-Planck-Institut fuer Stroemungsforschung und der Aerodynamischen Versuchsanstalt, No 19, 1958, pp 1-115. 9687338

DDC RSIC-68

Biological & Medical Sciences

Electrocardiogram Analysis by Electronic Computer, by M. O. Kulykov, I. K. Sledzevs'ka. RUSSIAN, bk.

*FTD-TT-63-938

Methods and Techniques of Biomedical Research in Space Flight Conditions, by I. T. Akulinychev, R. M. Bayevsky.
RUSSIAN, bk.

*FTD-TT-63-939

Neural Regulation of the Composition and Properties of Blood: Conclusion and Deductions, by A. U. Yunusov, 6 pp.

RUSSIAN, bk, Fiziologiya Krovi Cheloveka i Zhivotnykh v Zharkom Klimate, Chapt VII, 1961, pp 182-188.

JPRS 21405

Functions of the Digestive Organs in a Hot Climate, by A. Yu. Yunusov, G. F. Korot'do, 12 pp. RUSSIAN, bk, Funktsii Organov Pishchevareniya v Zharkom Klimate, Tashkent, 1962, pp 194-205, 223, 224.

JPRS 21479

The Basic Medicinal Remedies of Chinese Medicine, by F. I. Ibragimov, V. S. Ibragimova. RUSSIAN, bk, Gsnovnyye Lekarstvennyye Sredstva Kitayskoy Meditsiny, Moscow, 1960, 412 pp.

*FTD-TT-63-815

The Use of Radioactive Isotopes in the Fishing Industry, by G. S. Karzinkin, 77 pp. RUSSIAN, bk, Ispol'zovaniye Radioaktivnykh Izotopov v Rybnom Khozyaystve, Moscow, 1962, pp 1-73.

JPRS 21109

Planning and Allocation of Medical Personnel in Public Health Services, by I. I. Rozenfel'd, 139 pp. RUSSIAN, bk, Planirovanie Potrebnosti Zdravookhraneniya vo Vrachebnykh Kadrakh, Moscow, 1961.

OTS 63-11070

PL-480

Antrax, by B. N. Pastukhov, 117 pp. RUSSIAN, bk, Sibirskaya Yazva, 1962, pp 1-148.

JPRS 21185

The Technique and Method of Conducting Physio-Therapeutic Procedures, by K. F. Grishina, L. A. Komarova. (NY-7858)
RUSSIAN, bk, Tekhnika i Metodika Provedeniya Fizioterapevticheskikh Prots dur, Leningrad, 1963, pp 101-106, 115-118, 126-134, 160-169, 176-202, 317-320.

*JPRS

On the Radioactive Contamination of the Biosphere and Measures of Combatting These Contaminations, by N. V. Timofeyev-Resovskiy, 16 pp.
RUSSIAN, bk, Trudy Instituta Biologii Ural'skiy Filial, Ak Nauk SSSR, No 22, 1962, pp 7-16. 9670298

FTD-TT-63-664

Vitamin Sources and Their Utilization, Vitamin P Its Properties and Uses, 216 pp. RUSSIAN, bk, Vitaminnye Resursy i Ikh Ispol'zovanie, Vitamin P-ego Svoistva i Primenenie, Moscow, 1959.

OTS 63-11074 PL-480

- 41 -

Survival and Detection of Pathogenic Microbes in the Environment, by V. V. Skvortsov, V. S. Kiktenko, et al, 284 pp. RUSSIAN, bk, Vyzhivayemost' i Indikatsiya Patogennykh Mikrobov vo Vneshney Srede, 1960, pp 1-349. JPRS 21246 The Use of Tetracycline Antibiotics in Experimental Radiation Sickness, by A. M. Dumova, O. O. Chirkova, 9 pp. RUSSIAN, per, Antibiotiki, Vol VIII, No 8, 1963, JPRS 21189 pp 723-728. Cytochemical Studies of Glycogen the Central Nervous System of the Frog After Gamma-Irradiation, by A. L. Shabadash, S. O. Yenenko, et al, 17 pp. Gistolog i Embriolog, RUSSIAN, per, Arhkiv Anatom JPRS 21170 Vol XLIV, No 5, 1963, pp 26-36. Reactive Changes in the Epidermis After Thermal Injury, by G. Ya. Grafova, 13 pp. RUSSIAN, per, Arkhiv Anatom Gistolog i Embriolog, JPRS 21170 Vol XLIV, No 5, 1963, pp 96-105. Development of Afferent and Effector Innervation of Somatic Musculature, by A. A. Klishov, 19 pp. RUSSIAN, per, Arkhiv Anatom Gistolog i Embriolog, Vol XLIV, No 2, 1963, pp 93-102. JPRS 21415 Study of Association of the Molecules of Some Porphyrins, by G. P. Gurinovich, T. I. Strelkova, 12 pp. RUSSIAN, per, Biofizika, Vol VIII, 1963, pp 172-180. AEC-Tr-5966 On the Natural Radioactivity of the Leaves of Some Tree Species, by N. N. Alfimov, P. N. Yagovoy. RUSSIAN, per, Botan Zhur, Vol XLVIII, No 5, 1963, pp 724-726. *USDA Analysis of Electrical Activity of Cerebral Cortex Under Conditions of Brain Stem Transection, Bremer Technique, in Dogs at Various Age Periods, by I. I. Gokhblit, I. A. Korniyenko, 9 pp. RUSSIAN, per, Byul Eksper Biolog i Medit, Vol LV, No 6, 1963, pp 14-19. JPRS 21169 On Localization of Functions of the Cortex of the Cerebral Hemispheres in Rats, by Dang-Tkhu, 8 pp. RUSSIAN, per, Byul Eksper Biolog i Medit, Vol LV, No 6, 1963, pp 19-24. JPRS 21169

Chromosone Complex of Carios Vespertilionis Latr. Ixodidea Argasidae With Respect to the Problem of Its Generic Classification, by Yu. Goroshchenko. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIV, No 3, 1962, pp 665-668.

CSIRO/No 6211

Radiotelemetric Investigation of Temperature in the Human Digestive Tract, by Ye. V. Babskiy, A. M. Sorin, et al, 5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIX, No 5, 1963, pp 1213-1216.

JPRS 21286

Effect of Aeroions on Some Aspects of the Nervous Activity of Patients Suffering From Hypertension, by G. G. Yefremushkin, 7 pp.
RUSSIAN, per, Iz Ak Nauk Kazakh SSR, No 1, 1963, pp 32-34.

JPRS 21300

Modifications of Vascular Reactivity in Patients Suffering From Hypertension Under the Influence of a Single Treatment With Positive Aeroinization, by G. G. Yefremushkin, 13 pp.
RUSSIAN, per, Iz Ak Nauk Kazakh SSR, No 1, 1963, pp 37-46.

JPRS 21300

Concerning the Effect of Aeroions on Ciliated Epithelium, by G. K. Trofimov, O. V. Yesyrev, 9 pp. RUSSIAN, per, Iz Ak Nauk Kazakh SSR, No 1, 1963, pp 47-52.

JPRS 21300

Experimental Research in Space Physiology, by P. V. Vasil'yev, A. D. Voskresenskiy. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biolog, No 1, 1963, pp 15-23. 9212514

NASA TT F-186

The Antibiotic Cruzin and the Mechanism of Its Action on Cancer Cells, by N. G. Klyuyeva, G. I. Roskin, 46 pp.
RUSSIAN, per, Iz Ak Nauk SSR, Ser Biol, No 3, May-Jun 1963, pp 366-389.

JPRS 21324

Frequency of Chromosome Aberrations as a Function of Irradiation Intensity and the Physiological Status of Barley Seeds, by N. I. Nuzhdin, R. L. Dosortseva, et al. RUSSIAN, per, <u>Iz Ak Nauk SSSR</u>, <u>Ser Biol</u>, No 4, 1963, pp 514-525.

*AEC

Practical Results of 1962 Research by the Academy of Sciences Tadzhik SSR, by S. Umarov, 8 pp. RUSSIAN, np. Kommunist Tadzhikistan, 2 Apr 1963, p 2.

JPRS 21305

Training of Engineering Personnel for the Medical Industry, by A. G. Yegorov, A. P. Shevchenko, 8 pp. RUSSIAN, per, Medit Prom SSSR, Vol XVII, No 7, 1963, pp 3-8.

JPRS 21337

Selected Articles From the Russian Periodical Medit Radiolog.

Vol VIII, No 5, 1963, pp 89-94.
The Third Oncological Conferency and Fourth
Conference of Toentgenologists and Radiologists
of the Moldavian SSR, by Yu. B. Mandel'tsvayg,
9 pp.

JPRS 21231

JPRS 21214

Vol VIII, No 6, 1963. The Mechanism of Antiradiation Agents, by V. I. Kuznetsov, M. S. Kushakovskiy, 9 pp. (pp 27-32).

Analysis of the Action of Radioprotective Agents From the Aspect of Their Practical Application, by G. V. Sumarukov, Yu. B. Kudryashov, 16 pp, (pp 32-41).

Potentiometric Determination of the Effectiveness of Cysteamine Protection on Mice, by G. V. Sumarukov, Yu. B. Kudryashov, 6 pp, (pp 42-44).

The Effect of Unithiole on the Kidney Function of Dogs Injured by Ionizing Radiation, by 2. I. Poluboyarinova, 9 pp, (pp 44-50).

Transformation of Hemopoeitic Cells of Transplanted Allogenous Bone Marrow Into Immunologically Competent Cells in Irradiated Dogs, by I. L. Chertkov, M. N. Novikova, et al, 14 pp, (pp 51-60).

Study of the Dynamics of Erthropoiesis by Means of the Thymidine-H3, FE59, and Erythropoientin, by G. I. Kozinets, M. Tyubyana, et al, 5 pp. (pp 60-63).

The Mechanism of the Therapeutic Effect of Bone Marrow Transfusions in the Treatment of Radiation Sickness, by M. P. Bogoyavlenskaya, Ye. A. Zotikov, et al, 8 pp, (pp 63-68).

Selected Articles From the Russian Periodical Medit Radiolog. (Contd)

Vol VIII, No 6, 1963.

JPRS 21214

The Effect of Homologous Bone Marrow Transplantation on Certain Reactivity Indices and the Survival of Lethally Irradiated Rats, by I. G. Veksler, 7 pp, (pp 68-73).

The Reception of Ionizing Radiation by the Organism, by Yu. G. Grigor'yev, L. N. Kvasnikova, 12 pp, (pp 85-91).

Vol VIII, No 7, 1963. Some Data on the Application of New Radioactive Isotopes to Clinical Diagnostic Studies, by M. N. Fateyeva, 13 pp, (pp 3-11). JPRS 21280

The Utilization of Colloidal Radioactive Isotopes for Radiation Therapy of Craniopharyngiomas, by A. A. Volkov, I. S. Vaskin, 8 pp, (pp 23-28).

Reduction of the Rate of Recovery Processes as a Characteristic Feature of Acute Radiation Sickness After Repeated Irradiation, by V. A. Rezontov, 9 pp, (pp 52-56).

The Effect of Whole Body Alpha-Therapy on Lipoid Metabolism in Experimental Arteriosclerosis, by F. L. Leytes, 7 pp, (pp 62-67).

Reviews. The Effect of Ionizing Radiation on the Function of the Vestibular Analyzer, by A. V. Sevan'kayev, A. A. Sveshnikov, 11 pp, (pp 82-87).

Microorganisms of the Upper Layers of the Atmosphere, by A. I. Zhukova.

RUSSIAN, per, Mikrobiologiya, Vol XXXII, No 2,
Mar, Apr 1963, pp 362-370.

*USDA

Permissible Susceptibility of Cultivated Plant Varieties to Infectious Diseases, by S. E. Grushevoy, 6 pp. RUSSIAN, per, Nauch Dok Vysshey Shkoly, Biolog Nauk, No 1, 1963, pp 100-105.

ACSI 1-3319 ID 2246279

Practical Contributions of Scientific-Technical Societies, by N. N. Gritsenko, 13 pp. RUSSIAN, per, Nauch Tekh Obshchestva SSSR, No 1, 1963, pp 2-4.

JPRS 21305

| Achievements of Chemistry and Biology for Agriculture, by Ya. Peyve, 14 pp. RUSSIAN, per, Nauka i Tekh, No 4, 1963, pp 10-12. | JPRS 21305 |
|--|------------------------|
| Problems of Reanimatology in the Traumatic Clinic, by V. A. Negovskiy, 10 pp. RUSSIAN, per, Ortopediya Travmatologiya i Protezirovaniye, Vol XXIV, No 6, 1963, pp 11-18. | JPRS 21215 |
| 12002220 tol Mily No of 1505; pp 11-10; | 311/0 21213 |
| The Mystery of the Mallee Fowl, by L. Lebedeva. RUSSIAN, per, Priroda, Vol XII, 1962, pp 105-108. | CSIRO/No 5936 |
| Investigations on Lipoxidases in Grain Crops in Relation to the Problem of Rancidity in Groats, by M. P. Popov, D. A. Cheleyev. | |
| RUSSIAN, per, Sbornik Biokhimiya Zerna, No 5, 1960, pp 263-279. | GB/221 |
| Recent Achievements of the Academy of Sciences Estonian SSR, 5 pp. RUSSIAN, np. Sovet Estoniya, 29 Mar 1963, p 1. | JPRS 21305 |
| | 0.10 21505 |
| Changes of Energy Metabolism in Burn Sickness, by Ye. V. Gubler, E. P. Zimina, 11 pp. RUSSIAN, per, Sovet Meditsina, Vol XXVII, No 7, 1963, pp 56-62. | JPRS 21235 |
| Antibodies to Pencillin, by Yu. P. Borodin, 7 pp. RUSSIAN, per, Sovet Meditsina, Vol XXVII, No 7, 1963, pp 74-78. | JPRS 21234 |
| Ways of Coordinating Scientific Research in Medicine, by I. A. Kryachko, 16 pp. RUSSIAN, pcr, Sovet Zdravookhraneniye, No 11, 1962, | _ |
| pp 30-36. | JPRS 21305 |
| Sanitary Education at a New Stage, by B. D. Petrov, 7 pp. | |
| RUSSIAN, per, Sovet Zdravockhraneniye, Vol XXII, No 7, 1963, pp 3-8. | JPRS 21409 |
| Experiments on Human Beings in Modern Foreign Medicine Review of the Literature, by O. V. Perov, 7 pp. | |
| RUSSIAN, per, Sovet Zdravookhraneniye, Vol XXII, No 7, 1963, pp 71-76. | JPRS 21.408 |
| The Flying Fishes Exocoetidae of the Northwest Pacific, by N. V. Parin, 83 pp. | |
| RUSSIAN, per, Trudy Ak Nauk SSSR, Inst Okeanolog, Vol XXXI, 1960, pp 205-285. | OTS 61-31031 PL-480 |

The Changes in the Water Permeability of Peat-Bog Soils Resulting From Drainage, by L. V. Getov, 13 pp. RUSSIAN, per, <u>Trudy Belorusskogo Nauch-Issled</u> <u>Inst Melioratsii i Vodnogo Khoz</u>, No 8, 1958, pp 313-327. 9212596

OTS 63-11020 PL-480

New Procedures in the Study of Plant Physiology, by A. M. Smirnov, R. G. Butenko, 12 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 2, 1963, pp 73-79.

JPRS 21460

Luminescence Methods in Cytology, by A. S. Troshin, G. M. Barenboym, 7 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 6, 1963, pp 73-76.

JPRS 21357

Conference of Ophthalmologists of Northern Caucasus on Sanatorium and Health Resort Treatment of Eye Diseases, by G. A. Lyutkevich, 5 pp. RUSSIAN, per, Vest Oftal'mologii, No 3, May-Jun 1963, pp 79-82.

JPRS 21426

The Use of Cybernetics in the Development of Diagnosis of Disease, by Ye. A. Likhtenshteyn, 9 pp. RUSSIAN, per, Vest Rentgenolog i Radiolog, No 4, Jul-Aug 1963, pp 52-59.

JPRS 21424

Antibiotics for Plant Protection.
RUSSIAN, per, Vest Sel'skokh Nauk, Vol VII, No 8, 1962, pp 140, 141.

NLL Tr Bulletin Vol V. No 2, 1963

On the Biochemistry of Piricularia Oryzae, by Yu. V. Peruanskiy, I. N. Myusov. RUSSIAN, per, Vest Sel'skokh Nauk, No 3, 1963, pp 39-43.

*USDA

Selected Articles From the Russian Periodical Veterinariya.

*USDA

Vol XL, No 1, 1963, p 84.
Gratitude of the Cuban Republic Re-Biopreparations
For Inoculations Against Hog Cholera, by A. S. Rumsh.

Vol XL, No 2, 1963, pp 79-83. Veterinary Science and Education in Hungary, by E. S. Cherkasskiy.

| Selected | Articl | es From | the | Russian | Periodical |
|-----------|--------|---------|-----|---------|------------|
| Veterinar | riya. | (Contd) | | | |

*USDA

Vol XL, No 3, 1963, p 57. A Letter to the Editor Re-Mass Cases of Stachybotrys Toxicosis in Horses, by V. P. Fesenko.

Vol XL, No 5, 1963, p 91. Reunion of Former Graduates Moscow Veterinary Academy, 1948, by G. Isaychev, A. Trefilov.

Extragemminal Formation of Inflorescences on the Grapevine, by G. Turyanskiy.
RUSSIAN, per, Vinodelie i Vinogradarstvo SSSR, No 7, 1950, pp 17-19.

CSIRO/No 6190

Decree the Further Development of Biology Practice, 17 pp.
RUSSIAN, per, Voprosy Medit Khim, Vol IX, No 3, 1963, pp 227-232.

JPRS 21314

Conference on Botkin's Disease in Children, by G. B. Shirvindt, N. S. Protoklitova, 8 pp. RUSSIAN, per, Voprosy Okhrany Materinstva i Detstva, No 7, 1963, pp 89-92.

JPRS 21172

Second All-Union Conference on the Hygiene and Toxicology of Presticides, by S. G. Serebryanaya, 11 pp. RUSSIAN, per, Voprosy Pitaniya, No 3, 1963, pp 90-93.

JPRS 21305

Parthenogenetic Development of Ticks of the Ixodidae Family, by G. Pervomayskiy. RUSSIAN, per, Zool Zhur, Vol XXVIII, No 6, 1949, pp 523-526.

CSIRO/No 6204

Plenum of the Belorussian Republic Committee of the Medical Workers Trade Union, by M. Piletskiy, 7 pp. BELORUSSIAN, per, Zdravookhraneniye Belorussii, No 4, 1963, pp 86, 87.

JPRS 21305

The Belorussian Scientific Society of Hygienists in 1962, by M. Livshits, 8 pp. BELORUSSIAN, per, Zdravookhraneniye Belorussii, No 4, 1963, pp 88-90.

JPRS 21305

The Function of Non-Linear Effects on the Formation of Blocking Situation, by Yeh Tu-cheng, 11 pp. CHINESE, per, Chi-hsiang Hsueh-pao, Vol XXXIII, No 2, May 1963, pp 145-151.

JPRS 21435

Effects of Cauterization and Site Injections in the Prevention of Shock From Blood Loss -- Experimental Studies, by Shen Yung-k'ang, Lin Yen-chen, et al, 7 pp. CHINESE, per, Chung-hua Wai-k'o Tsa-chih, Vol II, No 5, 1963, pp 375-376.

JPRS 21177

The Mechanism of Action of Site Injections in Massive Blood Loss, by Shen Yung-k'ang, Lin Yen-chen, et al, 8 pp.
CHINESE, per, Chung-hua Wai-k'o Tsa-chih, Vol II, No 5, 1963, pp. 376-378.

JPRS 21177

Use of Reeled Pongee in Repair of Extensive Defects of the Abdominal Wall, by Fong Yu-hsien, Yu Yeh-ch', et al, 12 pp.
CHINESE, per, Chung-hua Wai-k'o Tsa-chih, Vol II, No 5, 1963, pp 386-388.

JPRS 21177

A Discussion of the Problems in Research Work for the Prevention and Treatment of Wheat Rust Disease, by Wang Huan-ju, 9 pp. CHINESE, per, Chung-kuo Nung-yeh K'o-hsueh, No 2, 1963, pp 26-30.

JPRS 21255

A Debate on Plant Colonies and Their Physiology, by Wang Tien-to, 25 pp. CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1963, pp 28-34.

JPRS 21435

The Metabolism of Phosphorus and Iodine in Deer, by J. Rerabek, A. Bubenik, 51 pp. CZECH, rpt, Metabolismus Fosforu a Jodu u Cervidu, 9213087

AEC-Tr-5631

Tests Made in Gaboon on the Destruction of Dense Forests by Poisoning, by Catinot, Leroy-Deval. FRENCH, per, Bois et Forets des Tropiques, No 69, pp 3-8, 12-16.

NZDIA

Thyroid and Suprarenal Correlation in the Course of Experimental Shock, by A. Nana, et al, 9 pp. FRENCH, per, Bulletin de la Societa Internat der Chir, Vol XX, 1961, pp 614-622.

Navy Tr 3586 NMS 815

The Adaptation of Insects to Insecticides, by J. Lhoste.
FRENCH, per, Chimie et Industrie, Vol LXXIV, No 4, 1955, pp 681-691.

C51RO/NO 6267

Effect of Radium Radiations on Colloids, Hemoglobin, the Enzymes, and the Red Blood Corpuscles, by Victor Henri, Andre Mayer.
FRENCH, per, Comptes Rendus, Vol CXXXVIII, 1904, pp 521-526.

AEC-Tr-5947

On Two Cases of Acromegaly: Hypertrophy: Extraordinary, Con-Congenital of the Upper, Lower and Cephalic Extremities, by Pierre Marie, 50 pp. FRENCH, per, Revue de Medecine, No 6, 1886, pp 297-333. 9212919

AEC-UCRL-Tr-974

Antituberculin Measures and Methods in Albania, by Starvri Leka, 5 pp. FRENCH, per, La Sante Publique, Vol VI, No 1, 1963, pp 53-57.

JPRS 21230

Method for the Determination of Antibodies Against Intraerythrocytic Protozoa. Preliminary Results, by R. Schindler, H. Dennig. GERMAN, per, Berliner und Munchener Tierarztliche Wochenschrift, Vol LXXV, 1962, pp 111, 112.

CSIRO/No 6353

A Quick Analysis of Medicines in the Apothecary Through Thin-Film Chromatography, by Horst Liebich, 11 pp.

GERMAN, per, Deutsche Apotheker-Zeitung, Vol XCIX, No 49, 1959, pp 1246-1248. 9687264

DDC RSIC-54

Electron Microscope Analysis of Extra-Fascicular Components of the Transpiration Flow by Means of Adequately Dispersed Noble Metal Suspensoids, by S. Strugger, E. Peveling.
GERMAN, per, Deutsche Botanische Gesellschaft Berichte, No 74, 1961, pp 300-304.

NZDIA

Experimental Testing of Methods for Detecting Soft Rot, by W. O. Schulz, M. Riewendt. GERMAN, per, Holz als Roh- und Werkstoff, Vol XX, 1962, pp 105-113.

NZDIA

Studies on Blood Coagulation Following Decompression, by II. Hartmann, 7 pp.
GERMAN, per, Inter Z Angew Physiol Einschl
Arbeitsphysiol, Vol XVIII, 1961, pp. 439-443.

Navy Tr 3584 NMS 813

Investigation of Chylomicron Metabolism. I. Report Intravenous Tests With Radioactively Marked Chylomicrons in Normal and Hyperlipemic Persons, by F. A. Gries, G. F. Jung, et al. GERMAN, per, Klinische Wochenschrift, Vol XLI, No 13, 1 Jul 1963, pp 628-633.

*ACSI I-3492 ID 2246309

| The Importance of the Kidneys for Erythropoiesis in Uremic Conditions, by L. Frederici, J. Fischer, 21 pp. GERMAN, per, Med Welt, No 47, 1963, pp 2504-2508. | AEC-UCRL Tr-975 |
|---|-------------------------|
| Pathogenesis, Clinical Course and Therapy of Renal Shock, by H. Thoelen, 17 pp. GERMAN, per, Praxis, Vol L, 1961, pp 1122-1127. | Navy Tr 3588 NMS 817 |
| Effects of Gibberellins on Trees, by G. Melchoir, R. Knapp. | |
| GERMAN, per, Silvae Genetica, Vol XI, No 2, 1962, pp 29-39. | CSIRO/No 6124 |
| Modern Methods for the Biological Treatment of Sewage in Smaller Communities and Their Use in Bavaria. Research Into Aerated Circular Open Earth Ditches, by B. Hanisch. | |
| CERMAN, per, Wasser und Abwasser, No 38, 1962, pp 1014-1020. | NZDIA |
| Isolation of Various Babesia Species and Their Transmission to Susceptible Animals, by II. K. Dennig. | |
| GERMAN, per, Z fuer Tropenmedizin und Parasitologie, Vol XIII, No 1, 1962, pp 21-24. | CSIRO/No 6364 |
| Tests for Revealing Antibodies to Babesia With the Complement Fixation Reaction, by R. Schindler, II. Dennig. GERMAN, per, Z fuer Tropenmedizin und Parasitologie, Vol XIII, No 4, 1962, pp 480-488. | CSIRO/No 6352 |
| Changes in the Liver of Rats in Chronic Ragwort Poisoning in Comparison With Liver Tumors Produced by Butter-Yellow. 2. Comparative Studies on Primary Liver Tumors, by H. Sedlmeier. GERMAN, per, Zentralblatt fuer Veterinarmedizin, Vol XIX, No 1, 1963, pp 23-26. | CSIRO/No 6365 |
| Contribution to the Knowledge on the Genus | CSIRO/NO 0303 |
| Raillietiella Samb, Pentastomida, by R. Heymons, 18 pp. GERMAN, per, Zoologischer Anzeiger, Vol LXVII, 1922, pp 45-56. | Navy Tr 3579 NMS 808 |
| Studies on Lymphocytic Polysaccharide and Glycoprotein Content in Patients Undergoing Roentgen Therapy, by L. Verga, 6 pp. | |
| ITALIAN, per, Bollettino della Societa Italiana di Biologia Sperimentale, Vol XXXVII, 1961, pp 101-103. | Navy Tr 3587 NMS 816 |

Studies on Lymphocytic Polysaccharide and Serum Glycoproteins on Guinea Pigs Under Sublethal Total Irradiation, by L. Verga. ITALIAN, per, Bollettino della Societa Italiana di Biologia Sperimentale, Vol XXXVII, 1961, pp 104-106.

*Navy/NMS 818

Studies on the Relationship Between the Serum Proteins and Lymphocytopoiessis Under the Effect of X-Rays on Experimental Animals Under Radiation and on Those With Cancers Cured by Ionized Radiation, by L. Verga, F. Coucourde.

ITALIAN, per, Minerva Medica, Vol LII, 1961, pp 3550-3555.

*Navy/NMS

Selected Articles From the Serbo-Croatian Periodical Arhiv Bioloskih Nauka.

Vol I, No 3, 1949, pp 253-257. Effect of Temperature and Moisture on the Exogenous Development of Eimeria Perforans and Eimera Stiediae, by Slobodan Sibalic, 5 pp. OTS 61-11252-2

PL-480

Vol II, No 2, 1950, pp 109-113. A Contribution to the Study of the Biology of Trichomonadidae, by Zlatibor Petrovic, 5 pp.

OTS 61-11252-1

PL-480

Vol II, No 3, 4, 1950, pp 211-221. A Contribution to the Study of the Biology of Trichomonadidae, by Zlatibor Petrovic, 11 pp.

OTS 61-11252-4

PL-480

Vol III, No 1, 2, 1951, pp 27-32. A Contribution to the Study of the Biology of Trichomonadidae, by Zlatibor Petrovic, 6 pp. OTS 61-11252-5

PL-480

Determination of Lindane Residues on Stored Beans, by B. H. C. Fernandes. SPANISH, rpt, 1961.

GB/221

Oestrogenic Activity of Subterranean Clover, Trifolium Subterraneum, by S. Goldsveig.

SPANISH, per, Agricultura Tecnica, Vol XVIII, No 1, 1958, pp 5-16.

CSIRO/No 6119

Form of Rot in Some Varieties of Pears, by A. Mezzetti. SPANISH, per, Stazione di Patalogia Vegetale Bolletino n.s., Vol XVII, 1937.

NZDIA

Nucleic Acid Content in the Tissues of Animals Irradiated and Treated With an Anti-Radiation Complex, by M. F. Lipkan, M. T. Pindich, 7 pp. UKRAINIAN, per, Ukrayin Biokhim Zhur, Vol XXXV, No 4, 1963, pp 514-518.

JPRS 21472

Effect of Ipraside on the Nitrogen Metabolism of the Rabbit Brain, by Ya. T. Terlets'ka, 7 pp. UKRAINIAN, per, <u>Ukrayin Biokhim Zhur</u>, Vol XXXV, No 4, 1963, pp 542-547.

JPRS 21472

A Better Understanding of the Party's Proposal to Combine Oriental and Western Medicine, by Nguyen Duc Thang, 23 pp.
VIETNAMESE, per, Hoc Tap, No 8, 1963, pp 59-64.

JPRS 21202

Chemistry

Electron Microscopy of Cellulose, by Kh. U. Usmonov, G. V. Nikonovich. (DC-8949) RUSSIAN, bk, Elektronnaya Mikroskopiya Tsellyulozy, Tashkent, 1962, pp 1-263.

*JPRS

Physicochemical Principles of Nickel Plating, by K. M. Gorbunova, A. A. Nikiforova, 155 pp. RUSSIAN, bk, Fiziko-Khimicheskie Osnovy Protsessa Khimicheskogo Nikelirovaniya, Moscow, 1960.

OTS 63-11003

PL-480

Chemistry of Organic Sulfur Compounds in Petroleum and Petroleum Products, 199 pp.
RUSSIAN, bk, Khimiya Sera-Organicheskikh Soedinenii, Soderzhashchikhsya v Neftyakh i Nefteproduktakh, 1958.

OTS 61-31074 PL-480

Ketonic Groups in an Oxidized Cellulose Molecule, by E. D. Kaverzneva, 31 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol LXVIII, No 5, 1949, pp 865-867. 9212595

OTS 63-11012 PL-480

Adsorption of Iodine and Bromine From Aqueous Solutions on Mineral Adsorbents, by B. Rozen. RUSSIAN, per, Dok Ak Nauk SSSR, Vol LXXXI, No 2, 1951, pp 243-245.

CSIRO/No 6156

Electron Paramagnetic Resonance Spectra Arising After Mechanical and Thermal Processing of Natural Cystine-Containing Polymers, by K. Ul'bert, P. Yu. Butyagin, 5 pp. RUSSIAN, per, Doklady Ak Nauk SSSR, Vol CXLIX, No 5, 1963, pp 1194-1196.

JPRS 21285

Scientific Chemistry (Contd)

The Diffusion of Niobium and Carbon in Niobium and Its Carbides, by P. V. Gel'd, V. D. Lyubimov, 21 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Met i Toplivo, No 6, 1961, pp 119-126.

AEC-Tr-5954

Investigation of the Hydrodynamic Processes in the Pseudo-Combustible Layer of Solid Particles Under High Pressure, by O. S. Chekhov. RUSSIAN, per, Khim Prom, No 7, 1961, pp 48-50.

TIL/T. 5352

Determination of the Molecular Weight Polyethyleneterephthalate According to End-Groups Analysis, by S. P. Matveyeva, et al. RUSSIAN, per, Khim Volokna, No 5, 1959, pp 18-21.

*NASA TT F-191

Basic Types of Quantitative Relationships of Fatty Acids in Vegetable Fats, by A. M. Goldovskiy. RUSSIAN, per, Masloboino-Zhirovana Promysh, Vol XXVIII, No 8, 1962, pp 10-15.

GB/221

Fluorides of Xenon and Radon, by A. B. Neiding, 10 pp. RUSSIAN, per, <u>Uspekhi</u> Khim, No 32, 1963, pp 501-507.

AEC-Tr-5920

New Studies on Chemical Reactions, by P. Harteck, R. Reeves, 17 pp.
RUSSIAN, per, Uspekhi Khimii, Vol XXXII, No 7, 1963, pp 882-895.

JPRS 21273

Crystalline Structure of Cyanides, IV. S-Ray Diffraction Studies of Elementary Cells and Space Group of K4Ru(CN)6.3H2) (Potassium Hexacyanotriaquoruthenate) and K4Fe(CN)6.3H2O (Monoclinic Type) Crystals, by V. A. Pospelov, G. S. Zhdanov, 10 pp. RUSSIAN, per, Zhur Fiz Khim, No 21, 1947, pp 405-410.

AEC-Tr-5902

Kinetics of Adsorption From Solutions. II. Influence of the Polydispersity of the Adsorbent, by J. Pouchly, 21 pp.
CZECH, per, Collection of Czech Chemical Communications,

Vol XXIV, 1959, pp 3007-3018.

AEC-Tr-5965

Coatings Which Can Be Used to Resist Oxidation at High Temperatures, by J. Tragnan. FRENCH, rpt, International Metal Spraying Conference, Madrid, May 1962.

*BISI 3385

Influence of Boron and Tellurium on Cast Iron, by M. A. Roos.
FRENCH. rpt. Paper Presented at the Thirty-Fifth

FRENCH, rpt, Paper Presented at the Thirty-Fifth Annual Congress of the Association Technique de Fonderie Lille, 30 Sep-Oct 1963.

BISI 3174

ţ

Scientific Chemistry (Contd)

Determination of the Oxidation Level \underline{V} of Uranium in Nonaqueous Solution by Means of Absorption Spectra in the Visible and Near-Infrared Range, by Gerard Kaufmann, Raymond Rohmer, 10 pp.

FRENCH, per, Bulletin Society Chimie, 1961, pp 1969-1973.

AEC-Tr-5914

Vapour-Phase Chromatography of Exhaust Gases, by J. van Rysselberge, J. Vaerman. FRENCH, per, Chimie et Industrie, No 6, 1961, pp 780-787.

*BISI 3398

Biosynthesis of Protein-Vitamin Concentrates From Petroleum, by Alfred Champagnat. FRENCH, per, Industrie, No 4, 1963, pp 242-246.

*ACSI I-3534 ID 2250278 519th MI Bn

A New Process for the Rapid Determination of the Oxygen Content of Steel, by R. Holler. GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIV, No 6, 1963, p 423.

*BISI 3391

Contribution on the Detection of the Sigma Phase and on the Kinetics of Its Formation and Solution in Iron-Chromium and Iron Chromium-Nickel Alloys, by F. K. Naumann.

GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol XXXIV, No 3, 1963, pp 187-194.

BISI 3295

Acetate-Veronal Buffer, by L. Michaelis. GERMAN, per, Biochemische Z, Vol CCXXXIV, 1931, pp 139-141.

CSIRO/No 6289

The Results From Coke Microscopy in Relation to the Position of the Coke Lumps in the Coke Oven Chamber, by M. U. Otte.

GERMAN, per, Brennstoff-Chemie, Vol XLIV, No 5, 1963, pp 144-149.

*BISI 3422

Thermal Conductivity Measurements on Mixtures of Various Organic Compounds With Water, by L. Riedel, 14 pp. GERMAN, per, Chemie Ingenieur Technik, Vol XXIII, No 19, 1951. pp 465-469. 9687184

DDC RSIC-40

Scientific Chemistry (Contd)

Documentation and Quantitative Analysis of Thin-Layer Chromatograms, by F. W. Hefendehl, 9 pp. GERMAN, per, Planta Medica, Vol VIII, No 1, 1960, pp 65-70. 9687265

DDC RSIC-53

Appraisal of the System Silicon - Oxygen, by O. Glemser, K. Beltz, 12 pp. GERMAN, per, Z fuer Anorganische und Allgemeine Chemie, Vol CCXCI, 1957, pp 57-66. 9211470

ACSIL Tr 1240

Deformation and Discontinuous Precipatation.

I. Effect of Deformation of the Precipitation and Changes in Precipitation Behavior, by Horst Boehm, 19 pp.

GERMAN, per, Z fuer Metallkunde, Vol LIV, 1963.

GERMAN, per, Z fuer Metallkunde, Vol LIV, 1963, pp 142-146.

AEC-Tr-5964

Helium Researches. VIII. A Method of Quantitative Measurement of Small Amounts of Helium, by P. Paneth, Wm. D. Urray, 14 pp. GERMAN, per, Z fuer Physik Chemie, Vol (A) CLII, 1931, p 110.

AAEC-Tr-14

Investigation of Uniform Dissolution and Pitting of Aluminum Electorodes, by II. Kaesche, 20 pp. GERMAN, per, Z fuer Physik Chemie, No 34, 1962, pp 87-108.

AEC-Tr-5888

The Determination of Sulfur in Organic Compounds as Sulfate Conductometric Titration, by Eva R. David, Maria Fodor, 10 pp.
HUNGARIAN, per, Acta Univ Debrecen, Ludovico Kossuth Nom, No 3, 1956, pp 111-116. 9213077

AEC-Tr-5877

Leaf Lipides as a Source of Fatty Acids Essential in the Diet, by Gino Secchi. ITALIAN, per, Rassegna Chimica, No 3, 1963, pp 118-121. *ACSI I-3536 ID 2250280 519th MI Bn

Experiments on Helical Instability in the Positive Column in a Magnetic Field, by Shimamoto Susumu, Imazu Shingo, et al, 9 pp.

JAPANESE, per, Kaku-Yugo Kenkyu, Vol IX, No 5, 1962, pp 463-471. 9213065

AEC-NP-Tr-1034

Scientific
Earth Sciences & Astronomy

Aerial Photography and a Study of Inland Waters, by Igor' Vladimirovich Popov, 171 pp.
RUSSIAN, bk, Aerofotos'yemka i Izucheniye Vod
Sushi, 1960, 167 pp.

JPRS 21163

Chemistry of the Earth's Crust, Geochemical Conference Devoted to the 100th Anniversary of the Birth of V. I. Vernadskiy, 14-19 March 1963. Abstracts of Reports Delivered at the Conference, by A. P. Vinogradov. (SF-2875) RUSSIAN, bk, Khimiya Zemmoy Kory, Moscow, 1963, pp 3-118.

*JPRS

Activities in Geomagnetism and Aeronomy 1960-1962, 84 pp.
RUSSIAN, rpt, Soobshcheniye o Nauch Rabot po Geom i Aeronomii 1960-1962 gg Predstavlyayetsya v Mezhdunarodnuyu Assotsiatsiyu Geom i Aeronomii.
K XIII General noy Assumbleye Mezhdunarodnogo Geodezicheskogo i Geoficicheskogo Soyuza, 1963.

JPRS 21277

Rate of the Vertical Novement of the Air Over the Caucasus Districts, by S. U. Guniya, 7 pp. RUSSIAN, bk, Trudy Tbilissk Nauchno-Issled Gidrometeorologiya Instituta, No 10, 1962, pp 117-120. 9670292

FTD-TT-63-709

The Application of Thermomechanical Aerosol Fogs on Rice, by E. I. Bonch, A. I. Petrova. RUSSIAN, per, Byul Vses Nauch-Issled Inst Zashchity Rastenii, No 5, 1961, pp 77-82.

*USDA

Structure and Dynamics of Magnetic Variations in the Arctic and Subarctic, by B. A. Aleksandrov, 14 pp. RUSSIAN, per, Geofiz Metody Razvedkov v Arktike, No 4, 196-, pp 10-20.

JPRS 21348

The Deep Geological Structure of the Ust'-yenisey Depression and Its Framework in the Light of New Geophysical Data, by Yu. G. Kiselev, 19 pp. RUSSIAN, per, Geofiz Netody Razvedkov v Arktike, No 4, 196-, pp 61-74.

JPRS 21348

Local Soil Conductivity and Its Distribution on USSR Territory, by V. Ye. Kashprovskiy, 19 pp. RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol III, No 2, 1963, pp 297-308.

JPRS 21428

Processing of Experimental Data on Observations of Water Absorption by Soil, by V. A. Zhilinskiy, 12 pp.
RUSSIAN, per, Iz Timiryazeva Sel'skokhoz Ak, Vol II, No 12, 1956, pp 131-140. 9212581

OTS 63-11016 PL-480 Scientific
Earth Sciences & Astronomy (Contd)

Some New Data on the Structure of Chondrites, by L. G. Kvasha.
RUSSIAN, per, Meteoritika, Vol XX, 1961, pp 124-136.

*AID

Selected Articles From the Russian Periodical Meteorolog i Gidrologiya, No 8, 1963.

JPRS 21242

Contamination of the Atmosphere by Industrial Wastes Under Anomalous Stratification Conditions, by M. Ye. Berlyand, R. I. Onikul, et al, 10 pp, (pp 3-10).

Correlation Analyses of Circulation Indices, by A. A. Filippova, 7 pp, (pp 32-36).

Notes on the Problem of Determining the Level and Character of the Tropopause, by D. A. Tarasenko, 10 pp, (pp 36-38).

Literature on Meteorology and Hydrology for 1962, 12 pp, (pp 58-62).

Some Problems of the Development and Location of Oil Refineries, by P. Ya. Beyder, S. M. Kogan, et al, 6 pp.
RUSSIAN, per, Neft Khoz, No 8, 1963, pp 1-5.

JPRS 21180

Selected Articles From the Russian Periodical Okeanologiya.

Vol II, No 3, 1962, pp 457-463. Froblems of Radioactivity, by B. A. Nelepo.

*Navy/HO 209

Vol II, No 4, 1962, pp 743-745.

Information on the Radioactivity of the Pacific Ocean Water, by N. N. Sysoyev, Yu. I. Kirilyuk.

*Navy/IIO 208

Vol II, No 5, 1962, pp 845-848. Strontium Ninety in the Surface Waters of the Atlantic Ocean, by N. I. Popov, E. G. Azhazha. *Navy/HO 210

Vol III, No 4, 1963, pp 706-714. Certain Problems in the Method for Making Meteorological Observations in the Open Sea, by Yu. A. Volkov, 13 pp. JPRS 21416

Scientific
Earth Sciences & Astronomy (Contd)

Selected Articles From the Russian Periodical Priroda.

No 2, 1963, pp 14-21. JPRS 21026 Life in the Universe, by A. I. Oparin, 10 pp.

No 6, 1963. JPRS 21278 Problems of Oceanography, by L. A. Zenkevich, 9 pp, (pp 9-16).

Sound Discloses the Secrets of the Ocean, by L. M. Brekhovskikh, 5 pp, (pp 65-70).

No 7, 1963, pp 25-31.

Underground Waters Are Our Hidden Sources of
Life, by B. S. Abramov, 14 pp.

Determination of the Actual Contact Areas of Surfaces by Means of Transparent Models, by E. M. Shvetsova.
RUSSIAN, per, Sbornik Iznos v Mashinakh, Inst Mashinovedenia Ak Nauk SSSR, Vol VII, 1953, pp 12-33.

*Redstone Arsenal

The Taxonomy of Forest Groupings, by
A. A. Korchagin, 18 pp.
RUSSIAN, per, Sbornik Nauchnykh Rabot Botan
Inst imeni V. L. Komarova, Ak Nauk SSSR,
1945. 9212593

OTS 63-11027 PL-480

Transparency and Color of Water in the Apheronsk Area of the Caspian Sea, by E. G. Arkhipova, G. V. Rzeplinskiy.
RUSSIAN, per, Trudy Gosudarstvennogo Okeanograf Inst, Vol LXI, 1961, pp 153-158.

*Navy/HO 211

The Calculation of Mean Gradients in Discontinuity Layer, by V. P. Trenin.
RUSSIAN, per, Trudy Gosudarstvennogo Okeanograf
Inst, Vol LXIII, 1961, pp 95-103.

*Navy/IIO 207

Experimental Investigation of Sound Wave Scattering in the Atmosphere, by M. A. Kallistratova, 77 pp. RUSSIAN, per, Trudy Inst Fiz Atmosfery, Atmosfernaya Turbulentnost, No 4, 1962, pp 203-256. 9685410

FTD-TT-63-441

Investigation of Swamp-Draining Norms, by A. I. Ivitskiy, 19 pp.
RUSSIAN, per, Trudy Inst Melioratsii Vodnogo i
Bolotnogo Khoz Ak Nauk SSR, No 8, 1958, pp 35-54.
9212590

OTS 63-11018 PL-480

Scientific Earth Sciences & Astronomy (Contd)

9212589

Study of Field Moisture Capacity of Peat Soils of the BSSR When Irrigated by Sprinkling, by M. V. Makovskiy, 13 pp.
RUSSIAN, per, Trudy Inst Melioratsii Vodnogo i Bolotnogo Khoz Ak Nauk SSR, No 8, 1958, pp 142-154.

OTS 63-11019 PL-480

Problems of Interaction Between Subsurface Waters and Permafrost Rocks in the Area of the Aldan Crystalline Massif, by N. A. Vel'mina, 5 pp. RUSSIAN, per, Trudy Inst Merzlotovedeniya, Materialy po Obshchemi Merzlotovedeniyu, Ak Nauk SSSR, 1959, pp 138-141. 9212594

OTS 63-11133 PL-480

Humus-Carbonate Soils of the Sochi District and Their Transition to Brown Forest Soils, by G. P. Gerasimov, 10 pp.
RUSSIAN, per, Trudy Inst Pochvennogo imeni
V. V. Dokuchaeva, 1949, pp 253-261. 9212596

OTS 63-11078

Selected Articles From the Russian Periodical Trudy Okeanograf Komissii, Metody i Rezul!taty Podvodnykh Issledovaniy, Vol XIV.

JPRS 21434

PL-480

Underwater Research at the Sevastopol Biological Station, Ukrainian Academy of Sciences, by M. P. Aronov, 9 pp.

Observations on the Operation of Fishing Trawls in the Black Sea, by B. V. Vyskrebentsev, 11 pp.

Place of Underwater Observations in Ichthyological Research, by D. V. Radakov, 7 pp.

Biological Research on the Submarine Severyanka, by M. I. Ryzhenko, 13 pp.

Requirements for a Research Submarine, by O. A. Sokolov, 10 pp.

Observations of Commercial Fish From Soviet Hydrostats, by O. N. Kiselev, 7 pp.

Designing a Soviet Bathyscaphe, by M. N. Diomidov, 6 pp.

Studies Conducted by the Vityaz' Under the International Indian Ocean Expedition Program, by P. L. Bezrukov, 10 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 8, 1963, pp 97-104. JPRS 21412

Scientific
Earth Sciences & Astronomy (Contd)

Band Model for Infrared Radiation Absorption by Water Vapor, by N. I. Kozhevnikov, Ye. A. Makarova, et al, 9 pp.
RUSSIAN, per, Vest Moskov Univ, Ser Fiz Astron, No 1, 1963, pp 54-61.

JPRS 21243

Shape of the Explosion Crater in a Surface Detonation, by V. M. Kuznetsov, 10 pp. RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 3, 1960, pp 152-156.

AEC-UCRL-Tr-968(L)

Device for Measuring the Water Content of Clouds in the Drop-Forming State and Rains, by I. V. Molokanov, 5 pp. RUSSIAN, Patent No 152,106, 3 Oct 1961, pp 1-4. 9669945

FTD-TT-63-621

A New Method of Determining the Natural Oscillations, Seiches of Enclosed Water Masses, Lakes, Bays, etc., by A. Defant.
GERMAN, per, Annalen der Hydrographie und Maritimen Meteorologie, Vol XLVI, 1918, pp 78-85.

*Navy/HO 206

Contributions to an Electrical Theory of Tornadoes, by A. Puehringer, 8 pp.
GERMAN, per, Archiv fuer Meteorologie, Geophysik und Bicklimatologie, Vol XIII, No 3, 4, 1963, pp 450-460.

JPRS 21343

Selected Articles From the Japanese Periodical Journal of Mcteorological Research.

Vol X, 1958. An Experiment on the Strain of Sonde Ameroid Barometer, (pp 70-72).

*Redstone Arsenal

Relations of Air Temperature to Weather, by T. Fujii, (pp 353-357).

*Redstone Arsenal

An Example of Remarkable Variation of Weather Trend and Forecasting of Beginning and Ending Time by Surface Weather Chart, by J. Tahara, (pp 358-360).

*Redstone Arsenal

On Results of an Experiment for Practical Use of the Three-Cup Anemometer, by T. Shinohara, 11 pp, (pp 587-590). 9687185

DDC RSIC-56

Scientific
Earth Sciences & Astronomy (Contd)

Selected Articles From the Japanese Periodical Journal of Meteorological Research. (Contd)

Vol X, 1958.
Observation of Atmospherics Associated With Thunderstorms and Its Application to Weather Forecasting, by K. Shimakawa, 22 pp, (pp 603-609). 9687263

DDC RSIC-55

A Study on the Dynamic Climatology of Cold Outbreaks in the Far East, by K. Suda, (pp 1053-1060).

*Redstone Arsenal

Vol XI, 1959. On Annual Weather Variation in Light of Classified Pressure Patterns, by R. Kudo, 10 pp, (pp 23-27). 9687187

DDC RSIC-61

Investigation on Forecasting Rules and Techniques, First Report, by K. Ueki, 38 pp, (pp 28-43). 9687261

DDC RSIC-58

A Note on the Distance of Meteorological Telemetry, by Y. Yajima, 9 pp, (pp 728-730). 9687186

DDC RSIC-59

Vol XIV, 1962, pp 80-93. On the Forecasting of Clear Air Turbulence, by Y. Sugimoto, K. Ono. *Redstone Arsenal

Vertical Distribution of Radioactivity in Cloud Elements, by V. Yu. Potsius, 9 pp. LITHUANIAN, per, Lietuvos TSR, Mokslu Akad Geolir Geograf Inst, No 11, 1960, pp 73-80.

pp 3-54.

AEC-Tr-5871

One-Solution Petrification of Sandy Soil by Means of Calcium Chloride and Water Glass, by R. Cebertowicz, R. Molisz, 44 pp.
POLISH, per, Rozprawy Hydrotechniczne, No 3, 1957,

OTS 60-21566

PL-480

Investigations Into the Water Absorption of Soil as Measured by the Enslin Apparatus, by R. Molisz, E. Paszyc-Stepkowska, 14 pp. POLISH, per, Rozprawy Hydrotechniczne, No 6, 1959, pp 95-108.

OTS 60-21566 PL-480

Reduction on Ground Vibrations When Blasting by Ulf Langefors, 19 pp. SWEDISH, per, Teknisk Tidskrift, Vol LXXIX, 1949, pp. 141-147.

AEC-UCRL-T-959(L)

Scientific Electronics

Operational Experience With the BR-5 Reactor, by A. I. Leypunskiy, O. D. Kazachkovskiy, 28 pp. RUSSIAN, rpt, Conference on Operational Experience With Atomic Power Reactors, Vienna, 4-10 June 1963.

AEC-Tr-5890

Indicator Devices for Radar Stations, by V. I. Rakov, 1040 pp.
RUSSIAN, bk, Indikatornyye Ustroystva
Radiolokatsionnykh, 1962, pp 1-532.

JPRS 21261

Technology of the Production of Radio-Electronic Equipment, by Vladimir Petrovich Gusev, 333 pp. RUSSIAN, bk, Tekh Proizvodstva Radioelektronnoy Apparatury, 20 May 1961, pp 1-388.

JPRS 21222

RUSSIAN, bk, Volzhskii i Kamskii Kaskady Gidroelektrostantsii, Moscow, 1960.

OTS 61-31060

PL-480

Mechanism of Flashover Along the Layers of Oil-Paper Insulation in D. C. Systems, by M. A. Greysukh, 19 pp.

RUSSIAN, per, Elektrichestvo, Vol VII, 1960, pp 77-82. AWRE-Tr-39

Variations in the Modulation of Strong Radio Waves in a Plasma, Ionosphere, by A. V. Gurevich, 24 pp. RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Radiofiz, No 4, 1958, pp 21-31. 9670304

FTD-TT-61-534

Fresh Successes in Science and Technology, by M. Keldysh, 8 pp.
RUSSIAN, np, <u>Pravda</u>, 21 Apr 1963, p 3.

NLL Tr Bulletin Vol V No 9 1963

Computers and the Automation of Control, by M. Sulim, 9 pp. RUSSIAN, np, Prayda, 19 May 1963, p 3.

NLL Tr Bulletin Vol V No 9 1963

Application of Chebyshev Polynomials in Calculations of Step Transitions, by Ya. M. Turover, N. I. Strutinskiy, 30 pp.

RUSSIAN, per, Radiotekh i Elektron, Vol I, No 2, 1956, pp. 143-161. 9686969

AID Rpt T-63-105

Diffraction of Electromagnetic Waves in a Plane Metal Grating With a Screen, by A. I. Adonina, V. P. Shestopalov, et al, 12 pp.
RUSSIAN, per, Radiotekh i Elektron, Vol VIII, No 6, 1963, pp 950-958.

JPRS 21329

Device for Measuring and Recording Atmospheric Turbulence, by V. P. Belyayev, G. N. Shur, 5 pp. RUSSIAN, Patent No 152107, 14 Dec 1961, pp 1-3. 9670293

FTD-TT-63-623

Performance of Ceramic Insulating Materials for Electrical Installations in Tropical Climates, by J. Mazanec, J. Hamersky.

CZECI, per, Elektrotechnicky Obzor, Vol LI, No 1, 1962, pp 17-22.

GB/125/IB 2066

Corona Effects Due to Overvoltage Surge Waves in Transmission Lines, by D. Kohoutova. CZECI, per, Elektrotechnicky Obzor, Vol LI, No 4, 1962, pp 168-172.

NZDIA

Study No 26 Concerning: Search for a Signal Theory. Recognition of the Signal in Noise, Part 2. FRENCH, pamphlet, Etude No 26 Concernant: Recherche D'une Theorie du Signal. La Reconnaissance du Signal Dans le Bruit, Fascicule 2, 2 Aug 1963, pp 1-42.

*ACSI I-3404-B ID 2246296

Questions Concerning the Processes of Communication. FRENCH, pamphlet, Questions Concernant les Processus de Communication, 25 Jul 1963, pp 1-4.

*ACSI I-3405-C ID 2246296

Study No 30 Concerning: Search for a Signal Theory. The Elementary Processes of Communication, Part 1. FRENCI, pamphlet, La Recherche D'une Theorie du Signal. Les Processus Elementaires de la Communication Fascicule 1, 2 Aug 1963, pp 1-31.

*ACSI I-3405-A ID 2246296

The Thermodynamic Central Station of the Maison de la Radio in Paris, by Jean Mallet. FRENCH, rpt, Ste le Froid Industriel Brissonneau-York, 2 Sep 1963.

*Navy/ONI

Series Production of Photomultipliers, by E. Morilleau. FRENGI, per, Acta Electronica, Vol V, 1961, pp 39-51.

*AEC

Some Considerations Concerning the Performances of Fast Response Photomultipliers, by C. Cernigoe, I. Gabrielli, et al. FRENCH, per, Acta Electronica, Vol V, 1961, pp 53-60.

*AEC

Scientific Electronics (Contd)

The CBH 81 Liquid Hydrogen Bubble Chamber. General, by R. Florent, B. Gregory, 16 pp. FRENCH, per. 1'Onde Electrique, Vol XLI, 1961, AEC-UCRL-T-985 pp 1001-1006. A New Principle in Generating High Voltages, by Rolf Wideroee, 24 pp. GERMAN, per, Archiv Elektrotech, No 21, 1962, AEC-Tr-5878 pp 387-406. Clearance of 220 kV No-Load Lines, by F. A. Likhachev. GERMAN, per, Elektricheskie Stantsii, No 3, 1962, NZDIA pp 63-77. Effect of Moisture on Electrical Properties of Egoxy Resins, by M. Marsal, P. Slaninka. GERMAN, per, Elektrie, Vol XVI, 1962, pp 2-7. GB/95/IB 2060 The Measurement of Coating Thickness by Means of Radiation, by II. Hart. **BISI 3282** GERMAN, per, Elektrie, No 3, 1962, pp 82-88. Measurement of Constant Light Sensitivity, Variable Light Sensitivity, and Time Constants of a Thermal *ACSI I-3521 Radiation Detector, by Kothar Kramer. ID 2246310 CERMAN, per, Jenaer Jahrbuch, Part I, 1963, pp 77-92. A Contribution to the Theory of Signal Distortions Through Non-Linear Characteristic Curves, by

Through Non-Linear Characteristic Curves, by

E. Augustin, 11 pp.

GERMAN, per, Nachrichtentechnik, Vol XII, No 12, ACSI I-3139
1962, pp 455-460.

ID 2240850

Terrain Dependent Direction Finder Failures and
Their Avoidance During Operation of the Ultra
Shortwave Revolving Adcock Direction Finder PST 467
and 580, by II. Kunze, II. Rattei, 8 pp.
GERMAN, per, Telefunken-Zeitung, Vol XXXIV, No 133,
Sep 1961, pp 215-220.

On Examination of an Electrostatic Precipitator,
by R. Koike, Y. Inamura, 18 pp.
JAPANESE, per, Journal of Meteorological Research,
Vol XI, No 8, 1959, pp 699-706. 9687262 DDC RSIC-57

ACSI I-3188

ID 2244396

Scientific Engineering

Selected Articles From the Russian Report Euratom Symposium on Punched-Tape Techniques in Documentation, 28-30 May 1963.

*AERE/Harwell

Methods of Data Handling, by K. H. Meyer-Uhlenryed.

Accessories for Punched-Tape Equipment, by W. Mohlen.

Terminology of Punched-Tape Techniques, by H. Buntrock.

Punched-Tape Techniques in Documentation Centres Without Punched-Card and EDPM Installation, by H. Petri.

Punched-Tape Techniques in Documentation Centres With Punched-Card or EDPM Installations, by H. H. Bernstein.

Tape-to-Card Conversion With IBM 1620, by H. van Hedel.

Tape-to-Card Conversion on the IBM 047. A Review of Previous Papers, by F. A. Behringer.

Transatom Bulletin and Card Index. The Advantages of Using the Flexowriter and Automatic-Printing Devices, by L. Kossovich.

The Precast, Reinforced Concrete Shul'ba Dam, by A. I. Gromov.
RUSSIAN, bk, Sbornyye Zhelezobetonnyye Vodosbrosnyye Sooruzheniya, 1962, pp 65-69.

The Use of Precast Reinforced Concrete for the Shul'ba Hydroelectrical Power Station Structures, by V. P. Likhachev.
RUSSIAN, bk, Sbornyye Zhelezobetonnyye Vodosbrosnyye Sooruzheniya, 1962, pp 70, 71.

High Temperature Fatigue, by S. V. Serensen, G. N. Meshchaninova. RUSSIAN, rpt, Ustalost' Metallov Akad Nauk SSSR, 1960, pp 19-26.

The Feasibility of the Use of Liquid-Metal Fusions as Lubricants, by A. N. Tynnyy, M. I. Chayevskiy, 9 pp.
RUSSIAN, bk, Voprosy Mashinovedeniya i Prochnosti v Mashinostroyenii, Kiev, Vol IX, No 8, 1962, pp 41-46. 9687110

*ACSI I-3338-A ID 2246287 519th MI Bn

*ACSI I-3338-B ID 2246287 519th MI Bn

CEGB 2791

FTD-TT-63-574

Influence of Heat Evolution of Cements on Concrete Steam Curing Conditions, by E. Erschler. RUSSIAN, per, Beton i Zhelezobeton, No 2, 1962, pp 79-81.

CSIRO/No 6113

Redistribution of Stresses in Prestressed Reinforced Concrete Structures, by S. Krylov, L. Makarenko. RUSSIAN, per, Beton i Zhelezobeton, No 2, 1962, pp 82-85.

CSIRO/No 6112

Calculation of Deformations in Reinforced Concrete Structures According to the New Recommendations, SNiP II-V. 1.62, by A. Gvozdyev. RUSSIAN, per, Beton i Zhelezobeton, No 6, 1962, pp 245-250.

CSIRO/No 6140

Investigation of the Flashover Characteristics of Dirty Insulators, by E. V. Korbut. RUSSIAN, per, Elektrichestvo, No 3, 1962, pp 76-81.

NZDIA

Calculation of the Performance and Steady-State Characteristics of a D. C. Transmission Line Interconnecting Two Power Systems, by S. R. Glinternik, V. V. Kichayev.
RUSSIAN, per, Elektrichestvo, No 5, 1962.

NZDIA

I. International Exhibition of Apparatus, by S. Gelfenbeyn, I. Pasechnikov RUSSIAN, per, Machinery in Agriculture, Vol XXI, No 1, 1961, pp 85-87.

CSIRO/No 6277

Lay Out of Industrial Buildings in Planning Ship Repair Facilities, by M. Fayn. RUSSIAN, per, Morskoy Flot, No 1, 1963, pp 32-34.

*Navy/ONI

Basic Problems in the Field of Information Storage and Retrieval Mechanisation, by N. I. Tyshkevich. RUSSIAN, per, Naucho-Tekh Informat, No 5, 1963, pp 3-7.

*AERE/Harwell

Nitriding of Tool Steels, by A. N. Serov. RUSSIAN, per, Stanki i Instrument, No 9, 1953, pp 18-20.

*BISI 3418

Displacement and Speed of Domestic Tankers of the Near Future, by V. M. Veksler. RUSSIAN, per, Sudostroyeniye, No 3, 1963, pp 5-11.

*Navy/ONI

Heat Transfer in Nucleate Boiling of a Liquid, by D. A. Labuntsov, 15 pp. RUSSIAN, per, Teploenergetika, No 12, 1959, pp 19-26.

AEC-TRG-Inf Ser-306

Freezing Out Moisture and Carbon Dioxide in Tubular Heat Exchangers, by G. V. Vasyunina, L. S. Aksel'rod, 36 pp.
RUSSIAN, per, Trudy Vses Nauch-Issled Inst Kislorodnogo Mash, No 4, 1961, pp 184-207.
9687072

FTD-TT-63-326

The Method of Solving an Electrodynamic Problem From Known Solutions of a Corresponding Static Problem, by Lin Wei-guan, 28 pp.
CHINESE, per, Wu-li Hsueh-pao, Vol XV, No 9, 1959, pp 449-464. 9211921

Emmanuel Coll Res Lang Ctr E-T-R-R-62-58

First Operation Results of an Air-Conditioning Plant, by P. Boyaux, F. B. Betout. FRENCI, rpt, Omnium Technique, O.T.H., 2 Sep 1963.

*Navy/ONI

Triple-Duct Air-Conditioning, by A. Stradelli. FRENCH, rpt, Studio Tecnico Industriale, 31 Aug 1963.

*Navy/ONI

Air Conditioning and Architecture, by A. Stradelli. FRENCH, rpt, Studio Tecnico Industriale, 2 Sep 1963.

*Navy/ONI

Discovery, Diagnosis and Treatment of Patentable Techniques in the CEA. Survey of Some Aspects of Industrial Patent Rights, by C. Gilguy. FRENCi, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 87-91.

*AERE/Harwell

The Exploitation of Nuclear Inventions, by A. Mongredien. FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 97-103.

*AERE/Harwell

Selected Articles From the French Periodical Centre de Documentation Siderurgique Circulaire d'Informations Techniques.

No 3, 1956, pp 549-554. Enquiry Into Hot Blast Valves, by L. Chatet.

*BISI 3399

No 4, 1962, pp 927-946.
Observations of the Phenomena of Deterioration in Blast Furnace Shafts, by M. J. Schoendoerffer.

*BISI 3421

No 9, 1962, pp 2015-2027. Rolling of H and IPE Girders at the Societe Metallurgique de Knutange, by R. Linconnet.

*BISI 3410

No 6, 1963, pp 1509-1523. Use of the Temperature of the Fumes for the Control of LD Blowing, by G. Messin. *BISI 33'

Hydro-Electric Storage Reservoir Operation in Tropical Regions, by P. C. Van Cauwenberghe. FRENCH, per, Houille Blanche, No 1, 1960, pp 56-70.

NZDIA

Protection of the St Malo Experimental Tidal Plant Against Marine Corrosion, by J. Sanhes. FRENCH, per, Houille Blanche, Vol XVII, No 2, 1962, pp 196-206.

CEGB 2893

Inductance of Toroidal Coils, by R. Gazenave, 14 pp. FRENCH, per, Revue Generale de l'Electricite, Vol LIX, No 4, 1950, pp 169-174. 9213063

AEC-NP-Tr-1039

vacuum and Ultra-High Vacuum in an Ion Injection and Magnetic Mirror Experiment, by E. Fischhoff, F. Prevot, 9 pp. FRENCH, per, le Vide, Vol XVII, No 99, 1962, pp 195-200.

AERE-Harwell-954

System for Object Cooling.
CERMAN, rpt, Einrichtung fuer Objektkuhlung,
20 May 1958, pp 1-3.

*ACSI I-3537 ID 2250279

Reflecting Properties of Broken Ceilings, Model Studies on the Reflector Arrangement of the New Philharmonic Hall in New York, by E. Meyer, H. Kuttruff, 6 pp. GERMAN, per, Acustica, Vol XIII, 1963, pp 183-186.

Navy Tr 3592

USRL 34

Investigations on the Formation of Banded Structure in Hypereutectoid Steels Using Samples With Artificial Segregations, by W. Peter, H. Finkler. GERMAN, per, Archiv Eisenhuttenwesen, Vol XXXIV, No 8, 1963, pp 605-616.

*BISI 3434

Modern Coiler Drives in Cold Strip Rolling Mills, by F. Kappius.
GERMAN, per, Blech, Vol X, Feb 1963, pp 75-80.

BISI 3235

The Influence of Iron Profiles on the Machining of Wheel Tyres, by H. Schimming. GERMAN, per, Deutsche Eisenbahntechnik, Vol X, No 9, 1962, pp 409-416.

BRT/360/385

The Properties and Applications of Precious-Metal Coatings in Engineering, by Heinz W. Dettner, 14 pp. GERMAN, per, Galvanotechnik, Vol LIII, No 2, 1962, pp 87-92.

AEC-SCL-T-505

Microscopie Analysis of the Trend of the Load Curve in Local Compression Tests, by J. Kisser, G. Linhardt.

CERLAN, per, Holz Als Roh-und Werkstoff, Vol XII, 1954, pp 329-354.

CSIRO/No 6283

The Post-War Development of Steelworks Crane Construction, by L. Greulich. GERMAN, per, <u>Klepzig Fachberichte</u>, Vol XLL, No 10, 1962, pp 403-407.

BISI 3316

The Influence of Hydrodynamic Lubrication on the Development of Sleeve Bearings, by W. Froessel, 11 pp.
GERMAN, per, Maschinenmarkt, Vol LXI, No 40,

AEC-TRG-Info-Ser 288 (CA)

1956. 9212351

Principles and Testing Possibilities of the

Magnatest Q Method in the Steel Industry, by F. Michalski, E. Kemenesey. GERMAN, per, <u>Material prufung</u>, Vol II, 1959, pp 56-64.

CEGB 2366

Methods for Obtaining Smooth Edges in Sheet Blanking, by M. Meyer. GERMAN, per, Mitteilungen der Forschungsgesgellschaft Blechverarbeitung, No 10, 1962, pp 282-293.

*BISI 3425

Tensile-Stress Corrosion Cracking of Low-Alloy Steels for Boiler Construction, by W. Radeker. GERMAN, per, Mitteilungen der Vereinigung der Grosskesselbesitzer, No 74, 1961, pp 332-344.

CEGB 2701

Possible Corrosion Progress in Oxidising Atmosphere in Slagging-Furnace Boilers With Special Attention to Tube Wall Temperatures, by A. Schneider. GERMAN, per, Mitteilungen der Vereinigung der Grosskesselbesitzer, No 77, 1962, pp 111-116.

CEGB 2888

Practical Experience With 14 MoV. 63, High Temperature Steel in the Mannheimer Steam Power Station, by H. Haferkamp. GERMAN, per, Mitteilungen der Vereinigung der Grosskesselbesitzer, Vol LXXXIV, No 6, 1963, pp 186-194.

DISI 3352

A Recording Testing Apparatus for Refactory Metal Discs, by Λ. Pohler, H. Stollner. GERMAN, per, Planseeberichte fuer Pulvermatallurgie, Vol XI, No 1, 1963, pp 18, 19.

*AERE/Harwell

New Hypothesis on the Effect of Cold Rolling Speed on Lubrication, by O. Pawelski. GERMAN, per, Rheologica Acta, Vol II, No 4, 1962, pp 273-280.

*BISI 3393

Fishing Equipment and Technique for a Refigerated Stern Trawler, by F. W. Jenckel. GERMAN, per, Schiffbautechnik, Vol XII, 1962, p 540.

GB/17/1490

Recommendations for the Assessment of Radiographs of Welds in Shipbuilding, by J. Hansen, L. Raudenkelb. CERMAN, per, Schweissen und Schneiden, Vol XIV, No 11, 1962, pp 480-482.

BISI 3389

The Non-Linear Wing Theory Especially for Wings With Small Aspect Ratio, by Kgersten. CERMAN, per, Sonderabdruck Aus Ingenieur-Archiv, Vol XXX, No 6, 1961, pp 431-452.

*FTD-TT-63-961

Selected Articles From the German Periodical Stahl und Eisen.

Vol LII, No 44, 1932, pp 1061-1066. Causes of Destruction in Blast Furnace Shaft Bricks, by F. Hartmann. CRL/T. 1234

Vol LXXXIII, No 4, 1963, pp 526-532. Experience With an Extensively Mechanised 1,000 Ton High-Speed Forging Press in a Special Steel Producing Werks, by W. Haring.

BISI 3307

Vol LXXXIII, No 6, Parts I-III, 1963, pp 702-715. Recent Operational Investigations on the Main Drives of Ingot Cogging Mills, by M. Proske, M. Hoffmann.

BISI 3349

Vol LXXXIII, No 17, 1963, pp 1058. Open-Die Forging Presses, Their Drives and Controls, by W. Dohrn, H. Winkler. *BISI 3392

Vol LXXXIII, No 8, 1963, pp 1107-1116. Influence of Individual Stands Speeds on the Rolling Process in the Continuous Rolling of Large Sections, by T. Dietrich.

*BISI 3432

Investigations on the Konitest Electrostatic Dust-Measuring Apparatus. The Influence of Temperature and Gas Throughout, by W. Konig, H. Rock. GERMAN, per, Staub, Vol XXI, No 8, 1961, pp 355-357.

CEGB 2882

1962, pp $288-30\overline{0}$.

Development and Use of Vacuum Devices, by K. Herr. GERMAN, per, Die Technik, Vol XVIII, No 5, 1963, ACSI I-3241 pp 360-363. ID 2244418 Standardized Shipment Packing -- An Important Condition for the Extensive Use of the Pallet System, by W. Bergner, W. Bohme. *ACSI 1-3482 GERMAN, per, Die Verpackung, No 4, Jul-Aug 1963, ID 2246304 pp 8, 9. 519th MI Bn Surface Treatment of High-Speed Steel Tools and Their Practical Application, by H. D. Weckener. GERMAN, per, Werkstatt und Betrieb, Vol XCI, No 1, 1958, pp 33-38. *BISI 3419 Surface Quality in Turning, by E. Allgaier. GERMAN, per, Werkstattstechnik, Vol LII, No 3, 1962, pp $154-\overline{159}$. CSIRO/No 6245 Information on the Part Played by Oxides in Cases of Damage to Tubes in High-Pressure Boilers, by R. Vincotte. GERMAN, per, Werkstoffe und Korrosion, No 9, 1962, **CEGB 2847** pp 535-538. The Influence of Internal Stresses and of the Magnetic Field on the Magnetic Domain Structure of Iron-Silicon Single Crystals, by H. Trauble. CERMAN, per, 2 fuor ! etallkunde, Vol LIII, No 4, 1962, pp $211-\overline{223}$. CEGB 2755 A Double-Focusing Mass Spectrometer With Inhomogeneous Magnetic Field and Toroid Condenser, by H. W. Wachsmuth, il. Ewald. GERMAN, per, Z fuor Naturforschung, Vol XVIIIa, No 3, 1963, pp $389 - \overline{397}$. *AEC Technology of Metal Bonding, by E. Brun. CERMAN, per, Z fuer Schweisstechnik, No 2, 1963, pp 42-46. *BISI 3417 A Type of Hygrometer Which Utilizes the Anodized Film of Aluminum by III. Humidity Characteristics of the Senser, by Hiroshi Watari, 32 pp. JAPANESE, per, Rikagaku Kenkyusho Hokoku, Vol XXXVIII,

AEC-SCL-T-502

.7

Project Rock'n Roll. Stability Experiments for Boiling Light-Water Reactor for Maritime Purposes. The Problem and Suggestions for Its Solution, 51 pp.
NORWEGIAN. per. Institutt for Atomenergi. No 8.

NORWEGIAN, per, <u>Institutt for Atomenergi</u>, No 8, 1959.

AEC-Tr-3874

Problems of Efficiency in Technical Research, by Remus Radulet, 5 pp.
RUMANIAN, np, Rominia Libera, No 5830, 14 Jul 1963, pp 1, 2.

JPRS 21312

Three-Valued Logic in the Automatization of Circuits, by M. C. Badillo, 9 pp. SPANISH, per, Revista de Calculo Automatico y Cibernatica, Vol VI, No 16, 1957, pp 1-7.

AEC-SCL-T-500

Static Reinforced Concrete Surfacings - Functional and Leading Principles, by A. Losberg. SWEDISH, per, Vag - och Vattenbyggaren, Vol VIII, No 3, 1962, pp 89-93.

CSIRO/No 6201

Scientific Materials & Metallurgy

Electroslag Remelting, by B. I. Medovar, Yu. V. Latash. (NY-7865)

PUSSIAN bk Elektroshlakovyy Perenlay Moscow 1963

RUSSIAN, bk, Elektroshlakovyy Pereplav, Moscow, 1963, pp 5-169.

*JPRS

Theory of Magnetic Mixing of Melts, by G. A. Ostroumov, 44 pp.

RUSSIAN, bk, Fiziko-Matematicheskie Osnovy Magnitnogo Peremeshivaniya Rasplavov, Moscow, 1960. OTS 63-11002 PL-480

Graphite Containing Refractory Materials, by N. A. Golushko, 136 pp.
RUSSIAN, bk, Grafitosoderzhashchiye Ogneupory, Moscow, 1962, pp 1-110, 9670309

FTD-TT-63-174

New Technology for Making Ball Bearing Steel, by G. N. Oyks, P. A. Matevosyan. (DC-8964) RUSSIAN, bk, Noveya Tekhnologiya Vyplavki Sharikopodshipnikovoy Stali, 1963, pp 1-126.

*JPRS

Fundamentals of Powder Metallurgy, by Gennadiy Ivanovich Aksenov, 61 pp. RUSSIAN, bk, Osnovoy Poroshkovoy Metallurgii, 1962, pp 21-166.

JPRS 20810

Strength of Powder-Metal Materials and Alloys at Normal and High Temperatures, by G. S. Pisarenko, V. T. Troshchenko, et al. (NY-7854)
RUSSIAN, bk, Prochnost' Metallokeramicheskikh
Naterialov i Splavov pri Normal'nykh i Vysokikh
Temperaturakh, Kiev, 1962, pp 1-275.

*JPRS

Steel Production by the Electroslag Remelting Nothod, by S. A. Leybrnzon, A. F. Tregubenko, 231 pp.

PUSSIAN by Projective Stali Natodom

RUSSIAN, bk, Proizvodstvo Stali Metodom Elektroshlakovogo Pereplava, 1962, pp 1-237.

JPRS 21290

Bibliography of Works on Rare Alkali Metals, by K. A. Vlasov, 34 pp.
RUSSIAN, bk, Redkiye Shchelochnye Metally Litiy, Rubidiy i Tseziy, Bibliografiya po Geokhimii, Eineralogii, Kristallokhimii, Geologii, Analiticheskim Metodam Opredeleniya i Ekonomike, 1962, pp 3-6, 260-267.

JPRS 21187

The Entropy and Heat Capacity of Alkali Metals in the Fused State, by I. M. Pchelkin, 8 pp. RUSSIAN, bk, Teploperedacha, Energeticheskiy Institut Ak Nauk SSSR, Moscow, 1962, pp 22-26. 9687071

FTD-TT-63-452

The Effect of Certain Surface Properties on the Boiling Crisis, by V. I. Yashnov, 13 pp.
RUSSIAN, bk, Teploperedacha, Energeticheskiy
Institut Ak Nauk SSSR, Moscow, 1962, pp 116-123.
9687071

FTD-TT-63-452

Precipitation of Ni₃Ta From Alloys of Nickel-Tantalum Binary System, by I. I. Kornilov, E. N. Pylayeva, 5 pp. RUSSIAN, per, Dok Ak Nauk SSSR, Vol XCI, 1953, pp 841-843. 9212193

AEC-UCRL-Tr-969

Effect of Vibrations on the Crystallization of Castings and Ingots, and Underlying Mechanism, by G. F. Balandin.
RUSSIAN, per, Fiz Metal i Metallov, Vol XIV, No 5, 1963, pp 673-677.

HB 6004

Role of Insoluble Impurities in the Crystallization of Netals Under Ultrasound, by 0. V. Abramov, I. I. Teumin.
RUSSIAN, per, Fiz Metal i Metallov, Vol XIV, No 5, 1963, pp 710-716.

HB 6001

Selected Articles From the Russian Periodical Iz Ak Nauk SSSR, Otdel Tekh Nauk, Metallurg i Gornoye Delo.

No 2, 1963.

Composition of the Ore Part of Sinters From Magnetites, by T. Ya. Malysheva, A. D. Rakcheyev, (pp 13-16).

HB 6045

Interaction Between Oxygen Jet and Liquid Pig Iron in the Oxygen Top Blowing of Steel, by B. M. Ogryzkin, (pp 17-20).

HB 6011

Influence of Deoxidation of Steel by Aluminum Upon the Removal of Sulfur From It, by S. E. Volkov, A. M. Samarin, (pp 22-27).

IIB 6012

No 3, 1963, np 58-66. The Changes in the Phase Composition of Basic Oxygen Furnace Slags During the Blow, by A. V. Rudneva, V. V. Smoktin.

HB 6000

Selected Articles From the Russian Periodical Iz Vysshikh Ucheb Zaved Chern Met.

| No 6, 1962, pp 16-20. The Specific Heat of Iron Ores and Sinters, by S. G. Bratchikov, G. A. Toporishchev. | *BISI 3424 |
|--|------------------|
| No 8, 1962, pp 21-28. Intensification of the Processes in the Blast-Furnace Hearth, by V. I. Loginov. | HB 5878 |
| No 2, 1963, pp 68-76. The Reducing Stage in the Electric Melting of Stainless Steels, by E. I. Kadinov, S. I. Khitrik. | 116 5899 |
| No 6, 1963. Ladle Treatment of Steel With Synthetic Titaniferous Slag, by N. I. Birukov, (pp 43-48). | IIB 6014 |
| Production of Extra Heavy Plate of Semi-Killed Steel, by I. G. Kazantsev, (pp 49, 50). | HB 6015 |
| Kinetics of Hydrogen Removal in the Vacuum Treatment of Liquid Steel, by E. S. Levin, K. T. Kurochkin, et al, (pp 58-67). | ilB 6013 |
| Causes of the Formation of Rolled-In Scale During Rolling of Steel, by V. I. Kuz'min, (pp 96-99). | HB 6002 |
| No 12, 1962. Investigation of Gas Flow in the Blast Furnace With the Use of Helium, by I. A. Kopyrin, et al, (pp 29-40). | IIB 5 879 |
| Special Features of the Structure of the Bath of a Rotary Ferrosilicon Furnace, by I. T. Zherdev, et al, (pp 61-66). | HB 5819 |
| Formation of Stretcher Strains in Sheet Metal During Plastic Forming Processes, by A. D. Tomlenov. RUSSIAN, per, Kuznechn Shtamp Proizv, No 2, 1963, pp 17-19. | HB 6033 |
| Effect of Machining on the Strength of Extra Hard Metals, by A. Ya. Artamonov, E. L. Shvedkov. RUSSIAN, per, Poroshkovaya Metallurgiya, Vol III, No 1, 1963, pp 79-82. | IIB 5996 |
| | |

| Investigation of the Specific Pressure, Specific Friction and the Coefficient of Friction in the Rolling of Netal Powders, by A. P. Chekmarev, P. A. Klimenko, et al. RUSSIAN, per, Poroshkovaya Metallurgiya, Vol III, No 2, 1963, pp 26-39. | НВ 5997 |
|---|---|
| Brazing of Titanium With Rapid Heating, by I. I. Il'yevskiy, N. S. Kochukov, 10 pp. RUSSIAN, per, Svarochnoye Proiz, No 5, 1963, pp 21-24. | JPRS 21437 |
| Plastic Armor of Steel Parts, by V. Klyachko. RUSSIAN, per, <u>Tekhnika Molodezhi</u> , No 6, 1963, p 30. | *ACSI I-3490 ID 2250314 525th MI Gp |
| Results of Investigation of Fabric Tensions Produced by the Roller Compensator, by A. Bystrov. RUSSIAN, per, Tekstil'naya Promyshlennost, Vol XVII, 1957, pp 36-40. | CSIRO/No 5789 |
| Determining the Iron Content in the Water of a Steam Power Plant Installation, by Yu. M. Kostrikin, N. M. Kalinina. RUSSIAN, per, Teploenergetika, Vol IX, No 7, 1962, pp 37-42. | CEGB 2838 |
| On the Problem of the Nature of Phase Transformation in Metals and Alloys, by N. V. Ivanova, T. A. Lebedev, | |

On the Problem of the Nature of Phase Transformation in Metals and Alloys, by N. V. Ivanova, T. A. Lebedev, 8 pp.
RUSSIAN, per, Trudy Leningrad Politekhn Inst, No 219, 1962, pp 108-114.

AEC-Tr-5953

On the Methods of Determining the Specific Losses of Cold-Rolled Transformer Steel, by V. V. Druzhinin. RUSSIAN, per, Vest Elektropromy, No 5, 1959, pp 41-43.

BISI 3388

Calculation of the Total Surface Area of Particles of a Fine Fraction, by G. S. Shtykhnov. RUSSIAN, per, Zavod Laboratoriya, Vol XXIX, No 5, 1963, pp 584-586.

HB 6026

Hot-Workability of Silicon Steels, by J. Telecky. CZECH, per, Hutnik, Vol IX, No 4, 1959, pp 121-128.

BISI 3338

Production of Rimmed Free-Cutting Steel by the Basic Oxygen (LD) Process, by Z. Zkenek, V. Danda. CZECII, per, <u>Hutnik</u>, Vol XII, No 1, 1962, pp 8-11.

HB 6048

Oxidation and Decarburization of Steel Surfaces and Surface Cracks, by V. Koselev, S. Burda. CZECI, per, Hutnik, Vol XIII, No 4, 1963, pp 180-186.

HB 5998

A Brief Direction for Computation of Cooling Processes of Glass, by Frantisek Schill, 10 pp.
CZECH, per, Sklara Keramik, No 11, 1961, pp 159, 160.

AEC-SCL-T-489

Effect of Mechanical Loading on the Corrosion of Steel in a Liquid Lead-Bismuth Alloy, by A. Dvorak. CZECH, per, Strojirenstvi, Vol XII, No 1, 1962, pp 39-43.

BISI 3364

Magnetic Roasting of French Ore Continuous Circuit Tests at Maizieres, by M. Boucraut. FRENCH, rpt, Paper Presented to the Mixed Ore Commission 9th May 1963, IRSID.

BISI 3368

Study of the Enrichment by Magnetic Roasting of Certain Lorraine Iron Ores, by M. Boucraut, R. Koskas. FRENCH, rpt, Paper Presented to the Sixth Inter-

BISI 3367

A Study of Description Stresses Developed During the Shrinkage of Certain Tropical Woods Perpendicular to the Grain, by M. Lawniczak, J. Raczkowski. FRENCI, per, Boise et Forets des Tropiques, No 82, 1962, pp 53-58.

national Ore Preparation Congress, IRSID, Jul 1963.

CSIRO/No 6062

Determination of Hydrogen in Steels and Ferro-Alloys, by J. Calmettes, L. Glenat. FRENCH, per, Centre de Documentation Siderurgique Circulaire d'Informations Techniques, Vol XX, No 3, pp 749-766.

BISI 3292

Metallography on the Reabsorption of Vacancies in Iron Monoxide During the Oxidation of Iron at High Temperatures, by M. Cagnet, J. Moreau.
FRENCH, per, Comptes Rendus Academic des Sciences, Vol CCXLIV, 1957, pp 2925-2928.

ACSIL Tr 1277

Metallography - Influence of the Purity and the Structure of the Metal on the Intergranular Diffusion of Oxygen in Iron, by R. Sifferlen, C. Bourelier. FRENCI, per, Comptes Rendus Academie des Sciences, Vol CCXLIV, 1957, pp 2928, 2929.

ACSIL Tr 1277

New System of Isotherms for Solid Wustite, by P. Raccah, P. Vallet. FRENCII, per, Comptes Rendus Academie des Sciences, Vol CCLV, No 16, 1962, pp 1919-1921. CRL/T. 1245 The System Zirconium Oxygen. I. The Electrical Resistance of Oxygen-Rich Zirconium, by Erich Gebhardt, II. D. Seghezzi, et al. FRENCI, per, Journal of Nuclear Materials, Vol IV, *AEC No 3, 1961, pp 241-254. The Recrystallization Behavior of Zirconium Wires, by Erich Gebhardt, H. D. Seghezzi, et al. FRENCH, per, Journal of Nuclear Materials, Vol IV, No 3, 1961, pp 269-271. *AEC Nature and Morphology of Transformation Products, by R. Castro, R. Tricot. FRANCI, per Memories les Scientifiques de la Revue Metallurgie, Vol LIX, No 9, 1962, pp 571-586. *BISI 3436 Influence of Carbon of Nitrogen, by R. Castro, R. Tricot. FRENCH, per, Memories Les Scientifiques de la Revue Motallurgie, Vol LIX, No 9, 1962, pp 587-596. *BISI 3436 Study of the Properties of p.f. Ash Cement, by M. Venuat. FRENCH, per, Revue des Materiaux de Construction, No 506, Nov 1957, pp 309-317. CEGB 2833 Use of Concentrates, by J. Astier. FRENCII, per, Revue de Metallurgie, Vol LX, No 1, 1963, pp 9-22. BISI 3380 Development of Problems of Blast Furnace Refractory Products Since 1959, by J. Schoendoerffer. FRENCII, per, Revue de Metallurgie, Vol LX, No 2. 1963, pp 127-140. BISI 3375 Very High Strength Constructional Steels, by L. dabraken. FRENCI, per, Revue de Metallurgie, Vol LX, No 5, 1963, pp 439-456. *BISI 3396 Extracts From Glass Containers, Strength, Dependence on Material and Shape, by H. Isken. GERNAN, rpt. GB/139/532

| Internal Frid | cation Based on the Interaction Between |
|---------------|---|
| Dislocations | and Solute Atoms, by G. Schoeck, 12 pp. |
| GERMAN, per, | Acta Metallurigica, Vol XI, 1963, |
| pp 617-622. | |

AEC-Tr-5970

Selected Articles From the German Periodical Archiv fuer Eisenhuttenwesen, Vol XXXIV, 1963.

No 4. Effect of Cerium on the Properties of a Chrome-Nickel Stainless Steel, by H. J. Kirschuning, et al. IIB 5960

No 5.
The Crystallographic Properties of Cementite Precipitation in Austenite, by W. Pitsch.

BISI 3320

No 7.
Segregation and Precipitation Hardening of
Alloys of X-Iron With Beryllium, by U. Heubner.

*BISI 3437

No 8.
Transformation Behaviour and Grain Growth of
Vacuum Treated Unalloyed Heat Treatable Steel,
by A. Rose, A. Wicher.

*BISI 3435

The Direct Application of Paint to Hot-Dipped Galvanized Steel, by J. F. H. Eijnsbergen. GERMAN, per, Bander, Blech, Rohre, No 1, 1961, pp 5-7.

*BISI 3426

Installations for Galvanising Stripes, Sheet Metal, Pipes and Fittings, by J. Kohlgruber. GERMAN, per, Bander, Bleche, Rohre, No 10, 1961, pp 500-507.

BISI 3387

Effect of Various Alloying Elements on the Susceptibility to Stress Corrosion Cracking of Austenitic Steels, by G. Riedrich, H. Kohl. GERMAN, per, Bergund Huttenmannishche Monatshefte, Vol CVIII, No 1, 1963, pp 1-8.

HB 5895

On the Influence of Coking Technically Inert Substances of Variable Particle Size and Variable Specific Surface Area on the Plastic Behaviour of a Coking Coal, by II. Pichler, K. H. Lauer. GERMAN, per, Brennstoff Chemie, Vol XLIV, No 5, 1963, pp 149-154.

*BISI 3423

Improved Free-Machinery Steel Containing S & Al, by R. Oppenheim, N. Jansen. GERMAN, per, DEW-Technische Berichte, Vol III, No 2, 1963, pp 58-62.

*BISI 3438

Preservation of Groundline Zone of Wooden Poles, by H. Gewecke. GERMAI, per, Deutsche Gesellschaft fuer Holzforschung, Mitteilung, No 48, 1961, pp 79-83.

CSIRO/No 6237

The Oriented Formation of Mullite From Al-Si-Spinel in the Transformation Series Kaolinite Mullite, by K. Von Gehlen.
GERMAN, per, Deutschen Kermamischen Gesellschaft, Berichte, Vol XXXIX, No 6, 1962, pp 315-320.

CSIRO/No 6150

Tail Oil: A Raw Material of Progressively Increasing Importance. II., by W. Asche. GERMAN, per, Farbe und Lack, Vol LXVIII, No 8, 1962, pp 519-525.

GB/39/PVM131/A/195

Galvanic Nobel Metal Platings for Electrical Engineering, by A. E. Kleinle, O. Loebich, 26 pp. GERMAN, per, Galvanotechnik, Vol LXIII, No 2, 1962, pp 62-74.

AEC-SCL-T-495

The Influence of Certain Elements on Spheroidal Graphite Formation in Cast Iron, by J. Verelst, A. De Sy.
GERMAN, per, Giesserei, Vol XLVI, No 6, 1956, pp 305-315.

BISI 3347

Comparison of Procedures for the Determination of Moisture in Wood, by F. Kollmann, G. Hockele. GERMAN, per, Holz als Roh- und Werkstoff, Vol XX, 1962, pp 461-472.

NZDIA

Sperotto Continuously Operating Decatising Machine, by Anon.
GERMAN, per, Melliand Textilberichte, Vol XLIII, No 6, 1962, pp 634, 635.

CSIRO/No 6159

Influence of Temperature and Velocity on the Deformation Properties of Pure Titanium and Titanium Alloy TiAL 6v4, by K. Willinger, II. J. Wittwer.
GERMAN, per, Metall, No 2, 1963, pp 97-107.

*ACSI I-3528 ID 2246315

The Natural Durability of Native and Tropical Wood Species Against Soft Rot, by W. Liese. GERMAN, per, Mitteilungen der Deutschen Gesellschaft fuer Holzforschung, Vol XLVIII, 1961, pp 18-28. CSIRO/No 6242 Contribution to the Elimination of Embrittlement in Transformer Sheet, by T. Bruggemann, E. Knutz. GERMAN, per, Neue Huette, Vol VII, No 7, 1962, pp 411-416. BISI 3386 On the Development of Nitrogen-Alloyed Steels, by H. Schultz. GERMAN, per, Neue Huette, Vol VIII, No 7, 1963 pp 391-398. *BISI 3397 Deformation Behaviour of Iron-Silicon Alloys Containing 3-6% SI, by G. Russmann, P. Klemm. GERMAN, per, Neue Huette, Vol VIII, No 7, 1963, *BISI 3395 pp 403-406. Studies on the Action of Copper Against Wood Pathogens, by G. Truckenbrodt. GERMAN, per, Phytopathologische Z. Vol XLI, 1961, CSIRO/No 6195 pp 370-386. Selected Articles From the German Periodical Stahl und Eisen. Vol LXXXII, No 6, 1962, pp 348-353. CRL/T.1227 Planning Calculation as an Aid in Work Preparation in a Cold Sheet Rolling Mill, by M. Beisch, H. H. Frensch. Vol LXXXII, No 8, 1962, pp 1176-1186. **BISI 3246** Influence of the Rolling Conditions, in Particular of the Final Rolling Temperature, on the Mechanical Properties and Notch-Toughness of Plain Carbon Low-Alloy Steels, by H. J. Wiester, W. Dahl. Vol LXXXII, No 9, 1962, pp 547-556. CRL/T.1175 Reactivity of Blast Furnace Coke and Its Relationship to Various Coking Conditions and Blast Furnace Indices, by II. Kahlhofer. Vol LXXXIII, No 5, 1963, pp 669-675. BISI 3326 Development and Design of a Hot Blast Stove

With Combustion Chamber Outside of the Checkerwork,

by A. Heuer, H. Tallmann.

Selected Articles From the German Periodical Stahl und Eisen. (Contd)

| | - 10 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 | |
|---------------------------|--|-----------------|
| Use of Plant | XXIII, No 4, 1963, pp 441-449. Pulverized Lime in the Electric Steel Pneumatic Transport as a Charging Method, Haucke, H. Clees. | BISI 3354 |
| Oxygen Top-Bl | XXXIII, No 7, 1963, pp 377-381. Contents of Low-Carbon Rimming Steels own With Oxygen From High-Phosphorus Pig LD-AC Process, by II. von Ende, W. Pfaff. | 11B 5937 |
| Presen | XXXIII, No 8, 1963, pp 972-978. It State of Iron Ore Pelletizing in North ca, by A. Send. | *BISI 3431 |
| Detect | (XXIII, No 10, 1963, pp 594-597. tion of Pipe in Hot Blooms or Slabs by of Gamma Radiation, by H. Ermert, A. Herwig, | HB 5961 |
| Invest | XXXIII, No 15, 1963, pp 907-911. Eightions on the Efficiency of an Ore-Bedding and the Sampling of Iron Ores, Part I, by Shard. | *BISI 3428 |
| Effect Load a | XXXIII, No 18, 1963, pp 1099-1106. c of Slag Formation of the Metallurgical and Desulphurization in the Basic Open a Process, by G. Tromel, H. Schafer. | *BISI 3430 |
| by F. W. | ge for Soaking and De-Oiling Wire Coils, Schneider. per, Technische Mitteilungen Krupp gsberichte, Vol XX, No 4, 1962, pp 73-77. | BISI 3374 |
| Tapping II. Beck. GERMAN, | per, Technische Mitteilungen Krupp, Vol XIV, pp 213-218. | нг. 5618 |
| The Corr | rosion Systems of Metals in Soil. Part II T. Markovic, M. Sevdic. per, Werkstoffe und Korrosion, Vol XI, No 1, | |
| 1960, pp | | CEGB 2965 |
| | | |

The Adsorption of Sulphurous Acid on Platinum, Iron Oxide and Chromium Oxide, Part I, by B. Neumann, E. Goebel.
GERMAN, per, Z fuer Elektrochemie, Vol XXXIX, No 6, 1933, pp 352-362.

CEGB 2813

A Post-Melting Effect in Pure Metals, by Bruno Predel, 13 pp.
GERMAN, per, <u>Z fucr Metallkunde</u>, Vol LIV, 1963, pp 206-212.

AEC-Tr-5960

Determination of Blaine Specific Area for Gypsum, by L. Chassevent. GERMAN, per, Zement-Kalk-Gips, Vol XV, No 12, 1962, pp 509-512.

GB/183

Investigations on the Sintering of Pure Oxides and With Additives, by R. Pampuch. HUNGARIAN, per, Prace Institute Hutniczych, Vol X, 1958, pp 333-347.

*AEC

Profabricated Stainless Steel Curtain Walls, by B. de Borde.
ITALIAN, rpt, International Congress of Prefabrication, 1st, Milan, 1962.

CRL/T. 1187

Compression Parallel to the Grain and Hardness Tests of Radiata Pine Grown in New Zealand, by S. Ogata, Y. Okohira.

JAPANESE, per, Journal Japan Wood Research Society, No 6, 1960, pp 223-226.

NZDIA

Reduction of Gadolimium, Dysprosium, Holmium and Erbium at the Dropping Mercurial Electrode, by Akio Iwase, 15 pp.

JAPANESE, per, Nippon Kagaku Zasshi, Vol LXXXI, 1960, pp 1266-1271.

AEC-SCL-T-497

Solvent Extraction Separation of Scandium From Yttrium and Rare Earth Elements, by Tsunenobu Shigematsu, Masiyuki Tabushi, et al. JAPANESE, per, Nippon Kagaku Zasshi, Vol LXXXIV, 1963, pp 263-267.

*AEC

Selected Articles From the Japanese Periodical Tetsu to Hagane.

| Vol XLVII, No 3, 1961, pp 519-521. Extraction of Nonmetallic Inclusions From Steel by Using an Ultrasonic Drill, by M. Nomura. | HB | 6063 |
|--|-----|------|
| Vol XLVIII, No 4, 1962, pp 644-645. Machinability of Selenium-Alloyed Free-Cutting Stainless Steel, by T. Ito. | HB | 5951 |
| Vol XLVIII, No 11, 1962, pp 536-538. Rapid Determination of Composition of Steelmaking Slags by Spectro-Chemical Analysis, by Y. Abe, et al. | НВ | 6058 |
| Vol XLVIII, No 11, 1962, pp 1383-1385. Manufacturing Trials on 20/30% Chrome-Nickel Steel Tubes and Their Properties, by Z. Matsuoko, et al. | IIB | 6056 |
| Vol XLIX, No 3, 1963. On the Microstructure of Self-Fluxing Blast- Furnace Sinter, by M. Kishitaka, M. Sato, et al, (pp 329, 330). | 11B | 6054 |
| Operation of a Basic Oxygen LD Plant Without Mixer at the Kukioka Works of Yawata Iron and Steel Co., Ltd, by T. Koide et al., (pp 394, 395). | HB | 5927 |
| Use of Cold Pig Iron in the Badic Oxygen LD Furnace, by Y. Aoyama, et al., (pp 395-397). | HB | 5928 |
| Studies on the Identification of Nonmetallic Inclusions With an Electron-Probe Microanalyzer, by H. Otaki, et al., (pp 418, 419). | iIB | 6062 |
| On the Relationship Between the Rate of Solidification and the Segregation of Ball-Bearing Steel, by Sh. Sawa, (pp 461-463). | нв | 6057 |
| Ladle Degassing of Unkilled Steel, by Y. Kitamura, et al., (pp 463-465). | НВ | 6046 |
| Comments on Ingot Molds Cast Directly From Blast-Furnace Hot Metal Compared With Cupola Iron, by Y. Kitamura, et al., (pp 525, 526). | НВ | 6047 |
| Effect of Tin Additions to Ductile Iron for Ingot Molds, by O. Tsuneda, (pp 527, 528). | HB | 6053 |

Selected Articles From the Japanese Periodical Tetsu to Hagane. (Contd)

| Vol XLIX, No 3, 1963. Additions of Uranium to 0.20-0.40% Carbon Steels, by M. Hasegawa, I. Onoda, (pp 536-538). | IIB 5 969 |
|---|------------------|
| Investigation Into Titanium and Columbium Sulfides in Steel, by K. Kano, M. Tokizane, et al, (pp 540-551). | 11B 6055 |
| Effect of Sulfur Additions on the Machinability of Austenitic Stainless Steel, by H. Osawa, K. Ito, (pp 623-625). | HB 5977 |
| Metallographic Analysis of the Nitrides of Aluminum, Titanium and Zirconium in Low-Carbon Steel, by Sh. Maekawa, et al, (pp 654-656). | iis 6051 |
| Analysis of Hydrogen in Cast Iron by the Vacuum Fusion Method, by E. Kato, (pp 641-643). | HB 6060 |
| Spectrographic Determination of Lanthanum and Yttrium in Austenitic Steel, by Z. Takeo, et al, (pp 1513, 1514.) | IIB 6061 |

| Measurement of Dichroism of Dyed Fibres, by M. Tanzawa. | |
|--|--------------|
| JAPANESE, per, <u>Togyo Kagaku Zasshi</u> , Vol LXIV, 1961, pp 206-211. | GB/256/T1252 |
| Polish Commercial Coals in the International Classification, by O. Milaszewicz. POLISH, per, Koks-Smola-Gaz, Vol IV, No 1, 1959, pp 17-37. | CRL/T. 1161 |
| The Reduction of Nonferrous Ores With Methane, by Al. Lupu. RUMANIAN, per, Studii si Cercetari de Metalurgie, | |
| No 4, 1959, pp 561-586. | HB 4724 |

Scientific
Mathematics & Data Processing

Selected Articles From the Russian Book
Bychislitel'naya i Informat Tekh, Sbornik Materialov
Konferentsii po Obrabotke Informat, Mashinnoum Perevodu
i Avtomaticheskomu Chteniyu Tedsta, Sostoyasheysya v
Moscow, 24-31 Jan 1961, 1962.

JPRS 21446

A High-Speed Transistorized Multiplication Circuit, by A. F. Smirnov, 13 pp.

Alternating Current Address System Power Supply, by V. N. Petrunychev, 9 pp.

Comparison of Parameters of Ferrite-Diode, Ferrite Transistor, Semiconductor and Vacuum Tube Logical Circuits, by B. I. Perel'man.

Construction of a High-Capacity Magnetic Memory Unit, by K. K. Briling, Yu. Kh. Krivorutskiy, 7 pp.

Contemporary Problems of Scientific and Technical Information, by A. I. Mikhaylov, 9 pp.

Current Trends in the Development of Magnetic Operative Memory Units, by R. V. Smirov, 20 pp.

Experience in the Industrial Exploitation of the Mozu-1000 Magnetic Memory Development of the Lem Viniti, by N. A. Karal'nik, 6 pp.

Industrially Produced Magnetic Ferrite Elements, by K. I. Kurbakov, V. I. Kuznetsov, 31 pp.

The Lem'-1-24 General-Purpose Automatic Computer Based on Ferrite-Diode Modules, by A. I. Posternak, I. I. Panfilova, et al, 9 pp.

Long Term Memory Devices, by K. I. Kurbakov, 41 pp.

Magnetic Drum Memory Units With Phase Inscription, by V. I. Babiy, 10 pp.

Magnetic Memory Unit Incorporating Magnetic Control Mozu-1000. Certain Factors Involved in Adjusting Industrial Models, by N. I. Gryaznov, P. V. Dyatlov, 10 pp.

On Fundamentals for Designing Machines for Information Processing, by A. M. Vasil'yev, 11 pp.

Scientific
Mathematics & Data Processing (Contd)

Selected Articles From the Russian Book
Bychislitel'naya i Informat Tekh, Sbornik Materialov
Konferentsii po Obrabotke Informat, Mashinnoum Perevodu
i Avtomaticheskomu Chteniyu Tedsta, Sostoyasheysya v
Moscow, 24-31 Jan 1961, 1962. (Contd)

JPRS 21446

Parametron Output Units, by A. G. Fedotenkov, V. N. Ozerov, 14 pp.

Pulse-Type Power Pack for Three-Cycle Magnetic Elements, by B. M. Paufilov, 7 pp.

Semiconductors in Devices for the Control of a Magnetic Decoder and in Rapid-Carry Keys for Parallel-Action Ferrite-Diode Circuits, by B. I. Perel'man, 37 pp.

Transistor and Ferrite Transistor Elements, by N. D. Fedotov, 11 pp.

Selected Articles From the Russian Periodical Dok Ak Nauk SSSR.

Vol LVI, 1947, pp 795-798. Some Limit Theorems of the Theory of Branching Random Processes, by A. M. Yaglom. *AERE-Harwell

Vol XCIX, 1954, pp 27-30. 9212190 On Discontinuous Solutions of Quasilinear Equations of the First Order, by A. N. Tikhonov, A. A. Samarskiy, 7 pp. AEC-UCRL-Tr-963(L)

Vol CXI, 1956, pp 291-294.
On Constructing Discontinuous Solutions of Quasilinear Hyperbolic Equations as Limits of Solutions of the Corresponding Parabolic Equations When the Viscosity Coefficient Strives Toward Zero, by O. A. Ladyzhenskaya, 5 pp.

AEC-UCRL-Tr-965(L)

Vol CXX, 1958, pp 25-28. 9212197 On Conducting Solutions of the Cauchy Problem for Certain Quasilinear Equations for Unlimited Increase of Time, by A. M. Il'in, O. A. Oleinik, 6 pp. AEC-UCRL-Tr-964(L)

Vol CLI, No 3, 1963, pp 493-496.
The Cardinal Numbers of Sets of Precomplete
Classes of Certain Functional Systems Connected
With Automata, by V. B. Kudryavtsev, M. V. Lomonosov,
10 pp.

JPRS 21444

Scientific Mathematics & Data Processing (Contd)

| On the Inequality of the Theory of Information, by E. L. Blokh, 12 pp. RUSSIAN, per, Iz Ak Nauk Otdel Tekh Nauk Energet i Avtomat, No 6, 1961, pp 93-100. 9212196 | AEC-UCRL- Tr-976(L) |
|---|----------------------------|
| Experiment in Word-For Word Translation of Patent Literature in English on the Strela-3 Computer, by A. M. Shvarts, E. A. Trakhtengerts, et al, 11 pp. RUSSIAN, per, Nauch-Tekh Informat, No 2, 1963, pp 42-45. | JPRS 20860 |
| Information Search in a Dictionary Based on the Method of Compressing Codes, by K. I. Kurbakov, R. V. Smirnov, 13 pp. RUSSIAN, per, Nauch-Tekh Informat, No 2, 1963, pp 46-49. | JPRS 20860 |
| Developments in Automation, by B. Sotskov, 5 pp. RUSSIAN, per, Radio, No 7, 1963, pp 4-6. | JPRS 21205 |
| An Orthogonal Approach For Solution of Systems of Differential Equations, by S. K. Godunov, 16 pp. RUSSIAN, per, Zhur Vychislitel Mate i Mate Fiz, Vol II, 1962, pp 972-982. 9212189 | AEC-UCRL- Tr-980(L) |
| The Effect of Modern Programming Methods and the Statement of Programming Problems in the Design of Computers, by Immo O. Kernor. GERMAN, per, Jenaer Jahrbuch, Part I, 1963, pp 201-208. | *ACSI I-3522 ID 2246313 |
| Use of Mathematical-Statistical Methods in the Control of Metallurgical Processes, by M. Knotek. GERMAN, per, Neue Buette, Vol VIII, No 7, 1963, pp 385-391. | *BISI 3429 |
| Method of Converting Electrical Analogue Values Into Digital Values, by K. Franz, J. Gottschald. | |

Digital Values, by K. Franz, J. Gottschald. GERMAN, Patent No 1,140,721, 1963.

*AERE-Harwell

Establishment of Some Methods of Higher Accuracy for the Integration of Differential Equations, by A. Cotiu. ITALIAN, per, Analele Stiintifice ale Universitatii, "Al. I. Cuza" din Iasi, Sectiunea I, Vol VI, 1960, pp 585-598.

*Redstone Arsenal

Scientific Mathematics & Data Processing (Contd)

On the Representation of Finitely Many-Valued Logics by Electric Circuits, by Toshihiko Kurihara, 10 pp. JAPANESE, per, Kyushu Daigaku Kogakubu Kogaku Shuho, Vol XXVIII, No 2, 1956, pp 102-106.

Theory of n-Valued Function-Lattice n-Valued Logics.

AEC-SCL-T-494

Theory of n-Valued Function-Lattice n-Valued Logics. III. General Solution of N-Valued Function Lattice Logical Equations of One Variable, by Makoto Itoh, 10 pp.

JAPANESE, per Kyushu Daigaku Kogakubu Kogaku Shubo

JAPANESE, per, Kyushu Daigaku Kogakubu Kogaku Shuho, Vol XXVIII, No 4, 1956, pp 239-243.

AEC-SCL-T-493

Theory of n-Valued Function-Lattice n-Valued Logics. VI. On the General Solution of Three-Valued Logical Equations, by Makoto Itoh, 6 pp.

JAPANESE, per, Kyushu Daigaku Kogakubu Kogaku Shuho, Vol XXVIII, No 4, 1956, pp 248-250.

AEC-SCL-T-496

Elements of Mathematical Logic, by Jan Lukasiewicz, 124 pp.
POLISH, bk, Elementy Logiki Matematycznej, 1963, pp 1-124.

OTS 61-11302

PL-480

The Effectiveness of the Use of Radioactive Isotopes in the National Economy, by G. F. Mikheyev, V. I. Postnikov, 117 pp. RUSSIAN, bk, Effektivnost' Primeneniya Radioaktivnykh i Izotopov v Narodnom Khozyaistve, 1962, Moscow.

AEC-Tr-5898

Efficiency of Pulse Columns Contribution to the General Theory of Intensified Counter Current Extractors, by A. M. Rozen, 33 pp. RUSSIAN, bk, Ekstraktsiya, Theroiya, Primenie, Apparatura, Moscow, 1962.

AEC-Tr-5958

Certain Laws Governing Hydraulics and Mass Transport in Packed Pulse Columns, by A. M. Rozen, V. A. Vasilyev, 23 pp. RUSSIAN, bk, Ekstraktsiya, Theoriya, Primenie, Apparatura, Moscow, 1962.

AEC-Tr-5957

Operation of Steam Generators in the First Atomic Power Plant, by G. N. Ushakov, V. B. Lytkin, 15 pp. RUSSIAN, rpt, IAEA Proceedings of the Conference on the Exploitation of Power Reactors, Jun 1963.

AEC-Tr-5887

Investigation of the Increment of Neutron Flux Density Obtained in the Breeding Zones at the Addition of an Extra Reflector Made of Various Substances, by M. N. Nikolayev, A. V. Zumarev, et al.

RUSSIAN, paper, <u>Issledovaniye Podpora Neytronnogo</u>
Potoka v Zonakh <u>Vosproizvodstva</u>, <u>Sozdavayemogo</u>
Dopolnitel'nymi Otrazhatelyami iz Razlichnykh
Materialov, 2-6 Sep 1963, Rpt No SM-42/87.

*FTD-TT-63-977

Electrophoresis of Complex Compounds.

III. Separation of Some Rare-Earth Elements by
Electrophoresis on Paper in a Medium of Nitrilotriacetic
Acid, by V. Noblokh, Rhen Te-hou, 12 pp.
RUSSIAN, rpt, Joint Institute for Nuclear Research,
1963. 9212349

AEC-UCRL-Tr-973

Critical Experiment, as a Means of Revealing the Physical Peculiarities of a Reactor, by V. A. Kuznetsov.
RUSSIAN, paper, Kriticheskiy Eksperiment, Kak Sredstvo Vyyavleniya Xizicheskikh Osobennostrey Reaktors, 2-6 Sep 1963, Rpt No SM-42/86

S. 10.00

*FTD-TT-63-978

Scientific-Technical Conference on Nuclear Physics and Linear Accelerators, 10-17 October 1961. Part III. Storage Devices.
RUSSIAN, bk, Materialy Nauchno-Technicheskoi Konferentsii po Yadernoi Fizike i Lineinym Uskoritelyam, 10-14 Oktyabrya 1961 Goda. Chast' III. Nakopitel'nye Ustroistva, Khar'kov, 1962.

*AEC

Papers on the Working Meeting on the Mossbauer Effect, Dubna, 2-6 July, 1962, 195 pp. RUSSIAN, rpt, Materialy Rabochego Soveschaniya po Effekty Messbauera, JINR-P-1231, 1963.

Consultant's Bureau

Selected Articles From the Russian Report Proceedings of the Conference on Neutron Dosimetry, 10-14 Dec 1962, Vol I, 1963.

*AEC

Recent Developments in Fast-Reactor Neutron Spectrometry Techniques: Ionographic Emulsions, Junctions, Fission Chambers and Activation Monitors, by J. L. Campan, P. Caumette, et al. (pp 13-24).

Problem Presented by the Use of Activation Detectors, by A. Charbonnel, (pp 71-80).

Study of the n,7 Reactions Cross-Section for Gold: Calculation of the Activity of a Thick Gold Detector, by J. J. Brisbois, (pp 181-193).

The Spectrometric Method and the Attenuation-Curve-Analysis Method for the Determination of the Activity of Threshold Indicators, by V. P. Mashkovich, (pp 253-260).

Dosimetry and Spectral Distribution of a Fast-Neutron Flux for Use in Biological Experiments, by Y. Arnaud, (pp 271-276).

Spectrum Analysis of Fast Neutrons by Means of the Li⁶(n,t)He⁴ Reaction, by C. Beets, M. Lott, (pp 293-305).

A New Nethod for Measuring Continuous Fast-Neutron Spectra- The Counting-Efficiencies Method, by G. G. Doroshenko, V. I. Glagolev, (pp 337-343).

Selected Articles From the Russian Report
Proceedings of the Conference on Neutron Dosimetry,
10-14 Dec 1962, Vol I, 1963. (Contd)

*AEC

Fast-Neutron Spectrometry by Means of Scintillation Monocrystals of Lithium Iodide, by V. V. Matveyev, V. P. Panova, (pp 455-460).

Measurement of Fast-Neutron Spectra by Means of Nuclear Emulsions, by S. Passe, (pp 481-499).

Selected Articles From the Russian Report Proceedings of the Conference on Radiation Damage in Solids and Reactor Materials, 7-11 May 1963, Vol III, 1963.

*AEC

Effects of Radiation Semiconductors: View of General Effects, by P. Baruch, (pp 3-14).

Accelerated Diffusion in Silicon, by P. Baruch, J. C. Pfister, (pp 43-48).

Effect of Neutron Irradiation on the Structure and Magnetic Properties of High-Permeability Manganese and Lithium Ferrites, by E. Labusca, N. Andreesco, et al, (pp 103-120).

Effects of Radiation on the Mechanical Properties of Ionic Crystals, by E. Andronikashvilly, N. Nolitov, et al. (pp 147-162).

Part I. Apparatus for Cold Neutron Scattering Measurements, by V. V. Golikov, et al., 13 pp. RUSSIAN, rpt, Symposium on Inelastic Scattering of Neutrons in Solids and Liquids, Chalk River, Canada, 10-14 Sep. 1962.

AERE-Tr-947

Part II. A Slow-Neutron Double Spectrometer at the IBR Reactor, by I. I. Bondarenko, et al., 13 pp.
RUSSIAN, rpt, Symposium on Inelastic Scattering of Neutrons in Solids and Liquids, Chalk River, Canada, 10-14 Sep. 1962.

AERE-Tr-947

Vitrification of Concentrated Fission Product Solutions. Technological Studies, by R. Bonniaud, Rancon, 31 pp. RUSSIAN, rpt, Symposium on the Treatment and Sotrage of High-Level Radioactive Wastes, Vienna, 8-13 Oct 1962.

AERE-Tr-943

Quasi-Static Liquid-Drop Model of Nucleus as Approximation of the Statistical Model, by V. M. Strutinskiy, A. S. Tyapin, 14 pp. RUSSIAN, per, Ak Nauk SSSR, Ordena Linina Inst Atomnoi Energii, 1963.

AEC-Tr-5955

The Kinetic Method for Studying the Mechanism of Chemical Reactions by Means of Tagged Atoms, by M. B. Neyman, G. I. Feklisov.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol XCI, No 5, 1953, pp 1137-1140.

*AEC

Calorimetrical Measurements of the Activity and Number of Gamma-Quanta Decary Acta, by K. K. Aglintsev.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol XCVIII, 1954, pp 357-360.

*AEC

The Structure of Uranyl Nitrate Dihydrate, by V. M. Vdovenko, E. V. Stroganov, et al. RUSSIAN, per, Radiokhimiya, Vol IV, No 1, 1962, pp 59-66.

*AERE-Harwell

Determination of the Correction for Thermal Inertia of the Calormeter During Calorimetric Measurements of Radioactive Preparations, by N. S. Shimanskaya.

RUSSIAN, per, Trudy Radievogo Institut Ak Nauk SSSR, Vol IX, 1959, pp 126-130.

*AEC

Polarised-Nucleus Sources for Accelerators, by B. I. Ad'yasevich, S. T. Belyayev. RUSSIAN, per, Trudy Vses Konferentsii po Yadernym Reaktsiyam pri Malykh i Srednikh Energiyakh, Ak Nauk SSSR, 1958, pp 87-92.

*AERE-Harwell

Measurement of the Cross-Sections of Inelastic Neutron Collisions With Fe, Ni and Nb Nuclei at Neutron Energies From 0.6 to 2.4 MeV, by A. I. Abramov, M. G. Yutkin. RUSSIAN, per, Trudy Vtoroi Vses Konferentsii, Ak Nauk SSSR, Jul 1960, 1962, pp 153-160.

*AERE-Harwell

The Relationship Between the Surface Energy of Liquids and the Accommodation Coefficients, by M. Baranayev, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 11, 1939, pp 1634-1641. 9687266

DDC RSIC-52

Vapor Pressure of Lead and Indium Sulfides, by R. A. Isakova, V. N. Nesterov, et al, 13 pp. RUSSIAN, per, <u>Zhur Neorgan Khim</u>, No 8, 1963, pp 18-23. 9212361

AEC-UCRL-Tr-977

The Use of Pulse Fission Chamber for Automatic Control of Reactor Power and Period, by Pavel Kovanic, Ladislav Haniger, 9 pp. CZECH, per, Jaderna Energie, Vol VIII, 1962, pp 221-224.

AEC-Tr-5924

Neutron Probe With Pulse Fission Chamber and Ferrite Transformer, by Pavel Kovanec, Jaroslav Rygl, 6 pp. CZECH, per, Jaderna Energie, Vol VIII, 1962, pp 427, 428.

AEC-Tr-5923

The Connection Between the Laminar Flow of Pure Gases Through Tubes and the Self Diffusion Coefficient, by S. Weber, 98 pp.
DANISH, per, Det Kongelige Danske Videnskabernes Selskab, Matematisk-Fysiske Meddelelser, Vol XXVIII, No 2, 1954, pp 1-138.

AERE-Harwell-Tr-946

Radioactive Fallout, by A. Van der Linde, R. Braams.

DUTGI, per, Chemisch Weekblad, Vol LVII, 1961, pp 501-505.

*AEC

Dosimetry and Spectrometry of Fast Neutrons by Radioactivation, by J. Lamerieux. FRENCH, rpt, Dosimetrie et Spectrometrie des Neutrons Rapides par Radioactivation, 1963.

*AEC

Study of the Variation in Efficiency of an Alpha Emitting Source as a Function of the Nature of the Support and the Applied Threshold, by Movchet, Boulloud, et al. FRENCH, rpt, Etude de la Variation de l'Efficacite d'une Source Emmittrice Alpha en Donction de la Nature du Support et du Seuil Applique, 1962.

*AEC

Handbook for the Calculation of Reactor Protections 1963. FRENCH, rpt, Formulaire sur le Calcul de la Protection des Reacteurs 1963, 247 pp.

*AEC

Measure of Effective Cross Sections of Fissionable Samples by a Method of Oscillation in Critical Assemblies, by R. Vidal, O. Trediakoff, et al. FRENCH, rpt, Measure des Sections Efficaces Effectives d'Enchantillons Fissiles par une Methode d'Oscillation dans les Assemblages Critiques.

ì

*AEC

Method for Preparing Tritiated Benzene for Scintillation Measurement of Low Level Tritium Contents in Hydrology, by L. Pichat, D. Sharefkin, et al.

FRENCH, rpt, Methode de Preparation de Benzene Tritie Pour la Measure par Scintillation en Hydralogie de Faibles Teneurs en Tritium, 1962.

*AEC

Radiation Protection in the Experimental Pile Marius 1962, by G. Cohendy. FRENCH, rpt, La Protection Contre les Radiations a l'Empilement Experimental Marius, 1962, 18 pp.

*AEC

Selected Articles From the French Periodical Bulletin d'Informations Scientifiques et Techniques.

No 69, 1963,

*AEC

Resolution of Problems Concerned With Treatment of Radioactive Wastes, by F. Duhamel, (pp 3-6).

Problems Caused by the Production of Radioactive Waste in the Paris Region, by P. Cerre, (pp 7-9).

Evolution of the Liquid-Waste Problem in the Centres in the Paris Region, by J. Bourdrez, (pp 11-17).

Conditioning and Storage and Large Size Solid Waste From Piles, by E. Mestre, (pp 19-25).

The Conditioning of Wealky Activated Solid Waste Matter at the Marcoule Centre, by J. Rodier, Bouzigues, (pp 27-35).

Problems Presented by Radioactive Waste at the Grenoble Nuclear Research Centre, by E. de Robien, (pp 37-41).

Problems Presented by the Treatment of Weakly Radioactive Effluents in an Atomic Centre, by G. Wormser, (pp 43-48).

Selected Articles From the French Periodical Bulletin d'Informations Scientifiques et Techniques. (Contd)

No 71, 1963. A Good Example of Protection in the Nuclear Field: The Story of the Fundamental Patents of Joliot's Team, by C. Gilguy, (pp 9-26).

Documentation in Nuclear Industrial Patent Rights, by M. Lenoir, (pp 65-67).

Some Specific Aspects of Industrial Patent Rights in the Nuclear Field, by J. C. Deck, (pp 69-77).

Bubble Motion in Fluidised Solid-Gas Systems, by L. Massimilla, P. Calia, et al. FRENCH, per, La Chimica e l'Industria, Vol XLV, No 1, 1963, pp 23-29.

A New Type of Radioactivity, by Irene Curie, Joliet, 5 pp. FRENCI, per, Comptes Rendus, Vol CXCVIII, 1934, pp 254-256.

On the Nature of Condensed Hydrocarbons Formed in the Hydrolysis of Mixtures of Uranium Mono- and Dicarbides, by B. Blanchard, P. Blum, 6 pp. FRENCH, per, Comptes Rendus, Vol CCLVI, 1963, pp 4227-4229.

Experimental Basis for the Design of a Waste Processing Plant in the Hot Laboratory of the EIR in Wurenlingen. Part I. Treatment of Weak a Radioactive Wastes, by H. R. von Gunten, 27 pp. GERMAN, rpt, Eidgenossisches Institut fur Reaktorforschung, Wurenlingen, Sep 1962.

Experimental Basis for the Design of a Waste Processing Plant in the Hot Laboratory of the EIR in Wurenlingen. Part II. Treatment of Wastes of Intermediate and High Radioactivity by Evaporation, by H. R. von Gunten, K. F. Eschle, 20 pp.
GERMAN, rpt, Eidgenossisches Institut für Reaktor-Forschung, Wurenlingen, Sep 1962.

The Concentration of Oxygen in Nitrogen Cryostats for Reactor Irradiation, by Lothar Heyne, 21 pp. GERMAN, rpt, Zentral Institut fuer Kernphysik, Rossendorf bei Dresden, Rpt ZfK-WF 11. 9213068

*AERE-Harwell

*AERE-Harwell

AEC-Tr-5976

AEC-Tr-5939

AEC-Tr-5963

AEC-Tr-5963

AERE-Harwell-Tr-955

Fast-Neutron Dosimetry Using Nuclear Track Films, by E. Piesch. GERMAN, per, Atompraxis, Vol IX, No 5, 1963, pp 179-188.

*AERE-Harwell

Heterogeneous Isotopic Exchange. I. The Exchange of Fe304 With Fe⁵⁹, by K. Egger, 26 pp. GERMAN, per, Helvetica Chimica Acta, Vol XLVI, No 148, pp 1339-1360, 1963.

AEC-Tr-5937

Exchange Interaction Between the Conduction Electrons of a Superconductor and Paramagnetic Ions, by Walter Baltensperger, 17 pp. GERMAN, per, Helvetica Physica Acta, Vol XXXII, 1959, pp 197-212.

AEC-Tr-5978

Inelastic Scattering of 14.7 MeV Neutrons on U-238, by C. Poppelbaum, P. Huber, et al, 29 pp. GERMAN, per, Helvetia Physica Acta, Vol XXXV, No 7, 8, 1962. 9212350

AWRE-Tr-40

Paper Chromatographic Separation of Radionuclides With Iron (III)-Hydroxide as Carrier, by H. H. Stamm, H. J. Schrolder. GERMAN, per, Journal of Chromatology, Vol X, 1963, pp 392-395.

*AEC

Selected Articles From the German Periodical Kernenergie.

Vol V, No 4, 5, 1962. Phase Reversal in a Column for the Separation of Boron Isotopes by Chemical Exchange in the System Anisole-BF₃-BF₃, by P. Kulicke, G. Kretzschmann, et al, 7 pp, (pp 267-269). 9213084

AEC-Tr-5909

Vapor Pressure-Isotopic Effect of Hydrogen and Boron Compounds, by I. Kiss, L. Matus, et al, 7 pp, (pp 329-331). 9213083

AEC-Tr-5913

Vol VI, 1963. Yield Determination of Threshold Reactions Ti(n,p) Sc and Ge(n, α) Zn in the Boiling Water Reactors, by S. Niese, P. Morzek, et al, (pp 37-39).

*AEC

Laboratory Study of Chlorination-Processing of Neutron-Irradiated Uranium Nuclear Fuel. Part 3. Plutonium Separation by Gas Chromatography of the Chloride Vapor on Activated Carbon, by D. Naumann, 12 pp, (pp 115-121).

AEC-Tr-5952

Investigation of Low-Noise Valves for Preamplifiers, by H. J. Dubrau, 17 pp.
GERMAN, per, Nuclear Instruments and Methods, Vol XV, 1962, pp 77-86. 9213051

AEC-NP-Tr-1042

Coprecipitation of Radionuclides With Titanium Dioxide Hydrate, by H. W. Levi, 13 pp. GERMAN, per, Nukleonik, Vol IV, No 8, 1962, pp 319-323. 9213053

AEC-NP-Tr-1041

Separation of Isotopes by Ionic Migration, by A. Klemm, 19 pp.
GERMAN, per, Physikertag Wiesbaden, Vol III, 1955, pp 73-89.

AEC-Tr-5926

The Production of Graphite-Coated Nuclear Fuel Particles According to the Fluidized Bed Process, by F. Benesovsky, E. Rudy, 15 pp. GERMAN, per, Planseeberichte fuer Pulvermetallurgie, Vol X, 1962, pp 168-177.

AEC-Tr-5952

The Wave Equation of the Electron in the General Relativity Theory, by L. Infeld, B. L. van der Waerden, 23 pp.
GERMAN, per, Sitzber Deut Akad Wiss, Kl Math, Phys Tech, No 9, 1933, pp 380-401.

AEC-UCRL-Tr-981

Electron Microscope Prearation of Radioactive Tagged Aerosols, by Guenter Riedel, 11 pp. GERMAN, per, Staub, Vol XXIII, 1963, pp 237-242.

AEC-Tr-5961

The Quantum Theory of the Atomic Nucleus, by G. Gamov, 12 pp.
GERMAN, per, Z fuer Physik, Vol LI, 1928, p 204.
9213082

AEC-Tr-5915

Theoretical-Experimental Exposed to a Fast Neutron Source, by L. Sani, L. Tondinelli, et al. ITALIAN, rpt, Indagine Teorico-Sperimentale sui Contatori a Protoni de Rinculo Esposti ad una Sorgente de Neutroni Veloci, Jan 1962, 58 pp.

*AEC

A Problem of Neutron Transfer Within a Spheric Medium, by Pier Paolo Abbati Marescotti, 17 pp. ITALIAN, per, Atti Acad Sci Torino, Vol 97, 1962-1963, pp 87-102. 9213079

AEC-UCRL-Tr-971(L)

A Fundamental Defect in Vacuum Measurement With a Mcleod Vacuum Gauge Using a Trap. Effect of the Diffusion of Nitrogen in the Mercury Vapour, by II. Ishii, K. Nakayama, 16 pp.
JAPANESE, per, Denki Shikensho Iho, Vol XXV, No 9, 1961, pp 657-663. 9212355

AERE-Harwell-Tr-949

The Mechanism of Freezing of Mocro-Organisms. II.
Morphological Observations of Freeze-Dried Coli Cells
With Electron Mocroscope, by Tokio Nei, 22 pp.
JAPANESE, per, Low Temperature Science, Ser B,
No 20, 1962, pp. 109-119. 9213086

AEC-Tr-5886

Neutron Shielding of Metals in Thermal Neutron Activation, by Y. Kamemoto, Y.Onoda.

JAPANESE, per, Nippon Kagaku Zasshi, Vol LXXXIII, 1962, pp 1164-1167.

*AEC

The High-Performance Fluoroglass Dosimeter, by Ryosuke Yokota and Saburo Nakajima, 34 pp. JAPANESE, per, Toshiba Rebyu, Vol VIII, No 2, 1963, pp 1-9.

AEC-UCRL-Tr-984

Fluorescent Investigations of Lucigenin Oxidation, by Jerzy Kroh, Zbiqniew Czerwik.

POLISH, per, Roczniki Chemii, Vol XXXI, 1957, pp 915-925.

*AEC

Physics

The Radiation Oxidation of Nitrogen. I. Kinetics of the Oxidation of Nitrogen Under Electron Impact and Its Connection With Ionisation Processes, by M. T. Dmitryev, S. Ya. Pshezhetskiy, 46 pp. RUSSIAN, bk, Deistvie Ioniziouyushchikh Izluchernii na Neorganicheskie i Organicheskie Sistemy, Moscow, 1953, pp 145-170. 9213074

AEC-NP-Tr-1035

The Radiation Oxidation of Nitrogen II. Kinetics of the Oxidation of Nitrogen Under the Action of Fast Electrons, by M. T. Dmitryev, S. Ya. Pshezhetskiy, 24 pp.
RUSSIAN, bk, Deistvie Ioniziruyushchikh Izluchenii na Neorganicheskie i Organichie Sistemy, Moscow, 1958, pp 171-181. 9213035

AEC-NP-Tr-1036

Structure With Foam Plastic Fillers, by A. Ya. Alexandrov, M. Ya. Borodin, 244 pp. RUSSIAN, bk, Konstruktsii s Zapolnitelyami iz Penoplastov, Moscow, 1962, pp 1-187. 9670417-V

FTD-TT-63-61

Proceedings of the Working Conference on Slow Neutron Physics 7-12 December 1961, 292 pp. RUSSIAN, bk, Materialy Rabochego Soveshchaniya po Fizike Medlennykh Neitronov 7-12 Dekabrya 1961 Goda, 1962, 240 pp. 9213073

AEC-Tr-5734

An Asymptotic Method in the Theory of Stability, by A. A. Galeyev, 16 pp.
RUSSIAN, rpt, Novosibirskii Gosudarstvennyi
Universitet, 1962.

AEC-NP-Tr-1025

On Movement of a Body of Variable Mass With Constant and Reducing Power Loss in a Gravitational Field, by G. L. Grodzovskiy, Yu. N. Ivanov.
RUSSIAN, rpt, O Dvizhenii Tela Peremnnoy Massy s
Postoyannoy i Ubyvayushehey Zatratoy Moshchnosti v
Gravitatsionnom Pole. Chast III, 66 pp.

*FTD-TT-63-973

Resonant Excitation of the Isomeric State of Ag¹⁰⁷ Which Has a Mean Life-Time of 63 Seconds, by G. E. Bizina, A. G. Beda, 12 pp. RUSSIAN, per, Ak Nauk SSSR Inst Teoret i Eksper Fiz, 1963.

AEC-Tr-5968

Interference Effects in Fission Cross Sections.
Phase Analysis, by I. V. Kirpychnikov, K. G. Ignatyev,
16 pp.
RUSSIAN, per, Ak Nauk SSSR, Inst Teoret i Eksper
Fiz, 1963, Jul.

AEC-Tr-5916

Measurement of Mand Partial Cross Sections of the Isotopes U²³⁵ and Pu²³⁹ for Resonance Neutrons, by K. G. Ignatyev, I. V. Kirpychnikov, 21 pp. RUSSIAN, per, Ak Nauk SSSR, Institut Teoret i Eksper Fiz, 1963, Jul.

AEC-Tr-5917

The Diffuse Reflection and Transmission of Light by Two Isotropic Media Separated by a Rough Surface, by Yu. Mullamaa, 19 pp. RUSSIAN, per, Iz Ak Nauk Estonskoy SSR, No 3, 1962.

RAND Corp RM-3869-PR

The Spectral Distribution of Direct and Diffuse Radiation, by O. Avaste, H. Moldau, 27 pp. RUSSIAN, per, Iz Ak Nauk Estonskoy SSR, No 3, 1962.

RAND Corp RM-3869-PR

An Approximate Solution to the Problem of Radiative Transfer in the Case of Anisotropic Scattering, by O. Avaste, 14 pp.
RUSSIAN, per, Iz Ak Nauk Estonskoy SSR, No 3, 1962.

RAND Corp RM-3869-PR

Thermodynamics of Tungsten Carbides, by V. I. Alekseyev, L. A. Shvartsman. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk Metallurg i Gornoe Delo, No 1, 1963, pp 91, 96.

BISI 3321

Photoluminescence of Solutions, by S. I. Vavilov, 30 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Fiz, 1945,
No 9, pp 283-304.

AEC-Tr-5919

Polarization of Radio Emission From Discrete Sources and the Study of Metagalactic, Galactic and Near-Solar Space, by V. L. Ginzburg, V. V. Pisareva. RUSSIAN, per, Iz Vysshykh Ucheb Zaved, Radiofiz, 24 pp.

*Navy/NRL

Thermodynamics of Interaction Between A1F₃, Na₃A1F₆, NaAlf₄ and Water Vapor, by V. P. Mashovets, B. F. Yudin, 14 pp. RUSSIAN, per, <u>Iz Vysshikh Ucheb Zaved, Tsvet Met</u>, 1962, No 4, pp 95-105.

AEC-Tr-5903

Arbitrary Block System of Coding Chemical Compounds, G. E. Vleduts, 13 pp. RUSSIAN, per, Nauch-Tekh Informat, No 2, 1963, pp 23-28.

Conversion of Images in a Model of a Continuous Neuron Network USSR, by B. P. Romanov, 17 pp. RUSSIAN, per, Nauch-Tekh Informat, No 2, 1963, pp 36-41.

JPRS 20860

JPRS 20860

Theory of Impurity Light Absorption in Molecular Crystals, by E. I. Rashba, 12 pp. RUSSIAN, per, Optica i Spektroskopiya, Vol II, 1957, pp 568-577.

AEC-Tr-5967

Systematic Errors in the Estimation of Sunspot Areas From Visual and Photographic Observations, by Z. Korohova. RUSSIAN, per, Solnechnye Dannye, No 3, 1962, pp 72-76.

CSIRO/No 6422

Certain Problems Related to Power Installations of Ships Supported on Submerged Hydrofoils, by V. M. Kolyuko.

RUSSIAN, per, Sudostroyeniye, No 3, 1963, pp 22-25.

*Navy/ONI

On the Role of Physical-Chemical Processes During Calorimetric Measurements of Radioactive Substances, by N. S. Shimanskaya. RUSSIAN, per, Trudy Radievogo Institut Ak Nauk SSSR, Vol IX, 1959, pp 131-133.

*AEC

The Part Played by Cascade Transitions in the Excitation of Helium Lines, by V. E. Yakhontova, 18 pp.
RUSSIAN, per, Vest Leningrad Univ, Scr Fiz i Khim, Vol XIV, No 10(2), 1959, pp 27-42. 9213071

AERE-Harwell-Tr-951

1961, pp 148-150.

The Radiation Oxidation of Nitrogen IV. Temperature Dependence and the Part Played by Ions in the Reaction Under the Action of Fast Electrons, by M. T. Dmitryev, S. Ya. Pshezhetskiy, 20 pp. RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2, 1959, pp 463-470. 9213064

AEC-NP-Tr-1037

The Hereditary Theory of Creep, by V. S. Namestnikov, Yu. N. Rabotnov. RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 4,

*ACSI I-3520 ID 2246311

High-Velocity Cumulative Jets, by N. P. Novikov, 16 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh, No 6, 1962, pp 22-28. 9687050

FTD-TT-63-566

Drawing of Copper Wire in an Ultrasonic Field, by V. P. Severdenko, V. V. Klubovich, 6 pp. BELORUSSIAN, per, Dok Ak Navuk SSR, Vol VII, No 2, 1963, pp 95-98. 9670302

FTD-TT-63-675

Investigation of the Time Resolution Characteristics of a Photomultiplier, by Shao-min Wang, 9 pp. CHINESE, per, Acta Physica Sinica, Vol XVIII, No 11, 1962, pp 600-604. 9687250

AID Report T-63-112

Thermoemission and Thermoluminescence in Fluorspar, by Antonin Bohun, 24 pp. CZECH, per, Journal of Physics, 1955, No 5, pp 224-238.

AEC-Tr-5875

Carbide Precipitation in Molybdenum Steels at 650 C, by J. Cadek. CZECH, per, Sbornik, Vol VII, No 6, 1961, pp 569-606.

BISI 3365

Use of Radiation of Bodies in Space in Order to Obtain a Considerable Reduction in Temperature, by Felix Trombe.

FRENCH, rpt, Centre National de la Recherche Scientifique, 3 Sep 1963.

*Navy/ONI

Process for Decreasing Heat Leakages in the Buildings Especially Under Hot and Dry Climates, by M. Roubinet. FRENCH, rpt, Comite Scientifique et Technique de

FRENCH, rpt, Comite Scientifique et Technique de l'Industrie du Chauffage de la Venitaltion et du Conditionnnement d'Air, 29 Aug 1963.

*Navy/ONI

Punctual Defects and Irradiation, by J. Friedel. FRENCH, rpt, <u>Defauts Ponctuels et Irradiation</u>, 1962, pp 551-628.

Gordon and Breach

Some Applications of Short-Lived Radiosotopes in the French Gas Industry, by C. Tellyer G. Courtois, 36 pp.
FRENCH, rpt, Production Use Short-Lived Radioisotopes Reactors, Proc. Seminar, 1962, No 1, 1963, pp 357-382.

AEC-Tr-5899

Three Fundamental Physics Patents. a) Nuclear-Resonance Magnetometer; b) Annularion Injector, Fusion; c) Plasma Gun, Fusion, by P. Bourely. FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 37-52.

*AERE-Harwell

Establishing the Equilibrium Diagrams of Binary Alloys by Observations of Intermetallic Diffusion. Application to the System Uranium-Zirconium, by Jean Philibert, Yves Adda, 5 pp. FRENCH, per, Comptes Rendus, No 245, 1957, pp 2507-2510.

AEC-Tr-5930

Influence of Internal Stresses on the Composition of Phases Formed by Diffusion in the Systems Uranium - Copper and Uranium - Aluminium, by Michel Beyeler, Yves Adda, 5 pp. FRENCH, per, Comptes Rendus, No 253, 1961, pp 2967-2969. 9213081

AEC-Tr-5933

Catalysis on Organic Semiconductors by Robert Salle, Jacquelline Gallard, 5 pp. FRENCH, per, Comptes Rendus, Vol CCLVI, No 12, 1963, pp 2588-2590.

AEC-SCL-T-504

Analysis of Movements by Means of Luminous Flashes, by F. Frungel, W. Thorwart, 13 pp. FRENCH, per, Mesures, Vol XXVI, No 289, 1961, pp 787-802. 9687258

DDC RSIC-67

Optics, by J. Badier, 13 pp.
FRENCH, per, L'Onde Electrique, Vol XLI, 1961, pp 1025-1028. 9212194

AEC-UCRL-Tr-986

Search for an Absolute Method of Analysis by X-Ray Fluorescent Applicable to Thin Films of Iron-Nickel Obtained by Evaporation in a Vacuum, by M. Pluchery.
FRENCH, per, Spectrochimica Acta, Vol XIX, No 2, 1963. pp 533-540.

BISI 3346

Testing the Image Quality of Photographic Lenses, by Johannes Fluegge, 51 pp.

GERMAN, rpt, Die Wissenschaftliche und Angewandt Photographie, Vol I, 1955-1962, pp. 234-257.

AEC-UCRL-Tr-983

Measurement and Calculation of Resonance Absorption in Gold, Uranium, and Throium Foils, by Manfred Brose.
GERMAN, rpt, Zur Messung und Berechnung der Resonanzabsorption in Gold, Uran- und Throiumfolien, 1962, 139 pp.

*AEC

Thickness Modes of Vibration of Cylindrical Disks of Barium Titanate, by G. Schmidt, R. Grohmann. GERMAN, per, Acustica, Vol XIII, 1963, pp 131-139.

*Navy/USRL

Selected Articles From the German Periodical Annalen der Physik.

Vol IV, No 28, pp 513-537. Experimental Verification of the Principle of Relativity, by A. H. Bucherer, 33 pp.

Navy Tr 3581 NMS 810

Vol XXIX, 1909. Experimental Determination of the Pressure of Saturated Mercury Vapor at O and Higher Temperatures, by Martin Knudsen, 11 pp. (pp 179-193). 9687188

DDC RSIC-60

Dependence of the Gas Diffusion Coefficient of the Mixing Ratio, by Anton Lonius, 14 pp, (pp 664-678).

AEC-Tr-5938

Vol VIII, No 7, 1961, pp 333-341. The Effects of High Pressure on Barium Titanate Ceramic, by Martin Richard.

*Navy/USRL

Proposal for the Numerical Recovery of Ultrasonic Test Results of Forgings, by W. Rauterkus. GERMAN, per, Archiv Eisenhuttenwesen, Vol XXXIV, No 8, 1963, pp 601-604.

*BISI 3433

The Calculation of Evapotranspiration, by B. Primault.
GERMAN, per, Archiv fuer Meteorologie, Geophysik and Bioklimatologie, Vol XIIB, No 1, 1962, pp 124-150.

CSIRO/No 6262

Molecular Flow at Very Low Pressures, by II. L. Eschbach, R. Jaeckel, et al, 11 pp. GERMAN, per, Congress on Vacuum Science and Technology, Vol II, 1962, pp 1110-1115. 9213069

AERE-Harwell-Tr-944

The System Na₂O-V₂O₅-SO₃ and Its Significance in Heating Surface Fouling in Oil Fired Installations, by K. Wickert, 13 pp.

GERMAN, per, Erdol und Kohle - Erdgas Petrochemie, Vol XIII, No 9, 1960, pp 658-664. 9211491

ACSIL Tr 1402

Investigation of the Surface of the Kilogram Prototype Nr. 22, by II. Laporte. GERMAN, per, Feingerate Technik, Vol XI, No 9, 1962, pp 394-396.

CSIRO/No 6161

Air Temperature as a Site Factor in the Falkenstein Moutains Bavarian Forest; Part 3. Extreme Temperatures, by A. Baumgartner. GERMAN, per, Forstwissenschaftliches Zentralblatt, Vol LXXXI, 1962, pp 18-46.

NZDIA

The Effect of Sound Field Interference on Flaw Detection in Solids, by F. Linhardt. GERMAN, per, Metall, Vol XIII, Part 2, 1959, pp 1133-1138.

*Navy/USRL

Heat Conduction in Electrically Insulating Crystals, by Guenther Leibfried, Ernst Schloemann, 36 pp. CERMAN, per, Nachrichten der Akademie der Wissenchaften in Gottingen aus dem Jahre, Vol XIa, 1954, pp. 71-93.

AEC-Tr-5892

Theory and Practice of Electron Microscopic Stereophotography, by J. G. Helmcke, 29 pp. GERMAN, per, Optik, Vol XI, No 5, 1954, pp 201-225. 9687259

DDC RSIC-65

The Thermodynamics of Phase Transformations in Ternary Systems, by E. Rudy, 14 pp. GERMAN, per, Planseeberichte fuer Pulvermetallurgie, Vol X, 1962, pp 32-41.

AERE-Harwell-Tr-952

Thermal Properties and Methods of Measuring the Thermal Expansion, Heat Capacity, and Thermal Conductivity of Polymers, by G. M. Bartenev, Yu. A. Gorbatkina, 14 pp.
GERMAN, per, Plasticheskie Massy, No 1, 1963, pp 56-64.

AEC-SCL-T-485

Investigations on the Detection of Defects in Thick Plates of Steel With γ -Rays, by H. Dresia, W. Sengspiel. GERMAN, per, Stahl und Eisen, Vol LXXXIII, No 5, 1963, pp 585-593.

BISI 3336

Examination of Some Time-Optimal Control Systems of the 2nd Order, by U. Engmann, 21 pp. GERMAN, per, Z fuer Messen Steuern Regeln, No 7, 1962, pp 299-305. 9670305

FTD-TT-63-409

Method for the Automatic Optimization of Control Circuits, by R. Scheabitz, 21 pp. GERMAN, per, Z fuer Messen Steuern Regeln, No 7, 1962, pp 311-317. 9670305

FTD-TT-63-409

The Polarization of the Quasimonochromatic Bremsstrahlung of a Monocrystal, by H. Ueberall, 10 pp. GERMAN, per, Z fuer Naturforschung, Vol XVIIa, 1962, pp 332-334.

AEC-SLAC-Tr-1

Selected Articles From the German Periodical Z fuer Physik.

Vol V, 1921, pp 285-314. 9670403 Elasticity and Expansion Coefficients of Helium, Hydrogen and Nitrogen, by F. Henning, W. Heuse, 35 pp.

DDC RSIC-49

Vol LXXXI, 1933, pp 363-376. Stopping Power of Atoms Having Many Electrons, by F. Bloch, 18 pp.

AEC-UCRL-Tr-972

Vol CXXV, 1949, pp 739-756. Needle Counter and Counting Tube in Metallographic Surface Investigation, by J. Kramer. *AEC

Vol CXXVIII, 1950, pp 538-545. Investigations With the Geiger Needle Counter on Treated Worked Non-Metals, by J. Kramer. *AEC

Vol CXXIX, 1951, pp 517-529. Individual Scattering of Molecules in a Gas With Maxwellian Distribution, by J. W. Hiby, M. Pahl. NZDIA

Vol CXXX, 1951, pp 348-355. Velocity Distribution of Individually Scattered Molecules in Gases, by J. W. Hiby, M. Pahi. NZDIA

Vol CXLII, 1955, pp 70-82. On the Theory of Hysteresis Losses in a Rotating Magnetic Field, by M. Kornetzki, I. Lucas, 11 pp. **RAE Tr 1008**

Sclected Articles From the German Periodical Z fuer Physik. (Contd)

Vol CLVI, 1959, pp 598-602. A Portable Universal Atom-Beam Detector, by H. Friedmann. *AERE-Harwell

Vol CLIX, 1960, pp 584-601. Theoretical Investigations of Vacancy Aggregates in Noble Metals, by Gottfried Schottky, 20 pp. AEC-Tr-5921

Studies of the Equation of State IV. The Compressibility Equation of Liquids, by A. Wohl, 9 pp. GERMAN, per. 2 fuer Physikalische Chemie, Vol XCIX, 1921, pp 234-241. 9670402

DDC RSIC-50

The Electron Spectra of 3,4-Benzeinnoline. Observation of a $\pi * \rightarrow n$ Fluorescence, by E. Lippert, W. Voss, 9 pp. GERMAN, per, 2 fuer Physikalische Chemie, Vol XXXI, 1962, pp 324-327. 9213062

AEC-NP-Tr-1040

An Apparatus for the Melting of Crystals of Minerals With a High Melting Point, Particularly, of Synthetic Precious Stones, by August Monath, 10 pp. GERMAN, Patnet No 901,413, 15 Mar 1954.

Navy Tr 3578

NRL 947

Crystal Growth and the Boundary Layer, by Gyulai Zoltan, 30 pp.
HUNGARIAN, per, Fiz Szemle, No 5, 1963, pp 131-143.

JPRS 21398

Personnel Film Dosimetry, by M. Bekes, Zs. Makra. HUNGARIAN, per, Magyar Tudomanyos Akademia, Kozponti Fizikai Kutato Intezetenek Kozlemenyei, Vol IX, No 4, 1961, pp 251-262.

*AERE-Harwell

Apparatus for Continuous Determination of CO₂ in Surrounding Air, by L. Luria. ITALIAN, per, Societa Italiana di Biologia Sperimentale, Vol XXXIV, 1958, pp 353, 354.

CSIRO/No 6355

Prospects of the Three-Dimensional Theory of Elasticity, by Hiroshi Miyamoto, 9 pp.

JAPANESE, per, Japanese Society of Mechanical Engineers Transactions, Vol XXII, 1956, pp 789, 790. 9687260

DDC RSIC-64

į

Diffusion of Fully Ionised Plasma Across a Magnetic Field I. Classical Theory, by S. Yoshikawa, 13 pp. JAPANESE, per, Kakuyugo-Kenkyu, Vol VII, No 2, 1961, pp 123-133.

AERE-Harwell-Tr-934

The Mechanism of Freezing in Micro-Organisms.

I. Factors Affecting the Survival of Yeast Cells
Subjected to Subzero Temperatures, by Tadashi Araki,
Tokio Nei, 22 pp.

JAPANESE, per, Teion Kagaku B, No 20, 1962, pp 57-67.

AEC-Tr-5885

The Mechanism of Freezing of Micro-Organisms.

II. Morphological Observations of Freeze-Dried

Coli Cells With Electron Microscope, by Tokio Nei,
20 pp.

JAPANESE, per, Teion Kagaku B, No 20, 1962,
pp 109-119.

AEC-Tr-5886

Quantitative Measurements of Cloud Element Radioactivity, by V. Yu. Potsius, 22 pp. LITHUANIAN, per, <u>Lietuvos TSR Mokslu Akad Geol</u> ir Geograf Inst, No 11, 1960, pp 48-68.

AEC-Tr-5891

Attempts to Explain the Reaction Between Water Glass and Calcium Chloride in the Process of Soil Stabilization, by R. Cebertowicz, E. Juszkiewicz, 23 pp. POLISH, per, Rozprawy Hydrotechniczne, No 3, 1957, pp 55-83.

OTS 60-21566

PL-480

Thermodynamic Properties of Zirconium and Hafnium Halides, by S. N. Lungu, 8 pp. RUMANIAN, per, Studii si Cercetari de Fizica, No 13, 1962, pp 29-35.

AEC-Tr-5906

Scientific Miscellaneous

p 194.

Man and Technology, by B. F. Lomov. (DC-10005) RUSSIAN, bk, <u>Chelovek i Tekhnika</u>, Leningrad, 1963, pp 1-266.

*JPRS

4 110

All-China Conference on Agricultural Science and Technology, 5 pp.
CHINESE, per, Chung-kuo Nung-yeh K'o-hsueh, No 5, 15 May 1963, p 53.

JPRS 21166

Scientific Conference Held by the Pine-Hoth Research Groups of Eastern China, by Ting Tao-mo, 5 pp. CHIMESE, per, <u>Lin-yeh K'o-hsueh</u>, No 2, Apr 1963,

JPRS 21166

Scientific Conference on the Problem of Earthquake Resistance of Buildings, by Chu Chi-ch'eng, 7 pp. CHINESE, per, T'u-mu Kung-ch'eng Hsueh-pao, No 1, 1963, pp 95, 96.

JPRS 21166

Scientific and Technical Research Fourth Plan, 1962-1965. FRENCH, rpt, 1962.

JPRS 21182

Brevatome, by P. Pottier.
FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 79-85.

*AERE-Harwell

License Contracts, by J. Pinau.
FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 105-108.

*AERE-Harwell

Brevatome: Some Conclusions, by J. P. Lepetre. FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 71, 1963, pp 109, 110.

*AERE-Harwell

The Future of Scientific Research in Israel, by Amos De-shlit, 8 pp.
HEBPEW, np, Haarets, 18 Sep 1963, p 38.

JPRS 21416

Perspectives for Scientific Research in Rumania, by I. Murgulescu, 19 pp. RUMANIAW, per, Lupta de Clasa, No 8, 1963, pp 23-35.

JPRS 21391

Scientific
Miscellaneous (Contd)

On Feature Characteristics and the Sixth Feedback Loop, by G. L. Otkhmezuri, 16 pp. UKRAINIAN, per, Avtomatyka, No 2, 1963, pp 41-52.

JPRS 21375

Experiments on Simulation of the Alpha System With Positive Feedback Loop, by $\rm M.\ I.\ Shlezinger,\ 11\ pp.$

UKIMINIAN, per, Avtomatyka, No 2, 1963, pp 82-88.

JPRS 21376

INFORMATION RECEIVED DURING OCTOBER

ON COVER-TO-COVER TRANSLATIONS

C3, Atomnaya Energiya, Vol XIII, No 5, 1962. BWRA Avtomaticheskaya Svarka, No 11, 12, 1962. Avtonatika i Telemekhanika, Vol XXIV, No 1-3, 1963. ISΛ Doklady Akademii Nauk SSSR, (Chemistry Section), CB Vol CXLVI, CXLVII, No 1-6, 1962. Amer Inst of Phys Doklady Akademii Nauk SSSR, (Physics Section), Sov Phys - Dok Vol CXLIX, No 4-6, 1963. Vol VIII, No 4 Doklady Akademii Nauk SSSR, (Mathematical Society), Amer Math Soc Sov Math - Dok Vol CL, No 1-6, 1963. Vol IV, No 3 Amer Inst of Phys Fizika Tverdogo Tela, Vol V, No 4, 1963. Sov Phys - Solid State Vol V. No 4 Fiziologiya Rastenii, Vol IX, No 1, 2, 1962. AIBS Fiziologiya Rastenii, Vol IX, No 3-6, 1962. CB Geologiya Nefti i Gaza, Vol IV, No 12-A, B, 1960. RRG Inzhenerno Fizicheskiy Zhurnal, Vol VI, No 4, 1963. JPRS 21292 Izmeritel'naya Tekhnika, No 1-3, 1963. ISA Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVI, No 9, 10, 1962. CTT Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, ΛGU No 6, 1963. Izvestiya Vysshikh Uchebnykh Zavedeniy, Geodeziya i AGU Aerofotos'yemka, No 6, 1962. Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiofizika, Vol VI, No 1, 1963. JPRS 21326 Kauchuk i Rezina, Vol XXI, No 9, 1962. RAPRA Kinetika i Kataliz, Vol III, No 6, 1962. CB

CB

Kolloidnyi Zhurnal, Vol XXV, No 1, 1963.

| | Optika i Spektroskopiya, Vol XIV, No 4, 6, 1963. | OSA |
|----|---|---|
| | Pochvovedeniye, No 4-6, 1962. | Scripta Technica |
| | Problemy Kibernetiki, No 9, 1963. | JPRS 21448 |
| | Svarochnoye Proizvodstvo, No 11, 12, 1962. | BWRA |
| | Teoriya Veroyatnostei i Yeye Primeniya, Vol VII, No 4, 1962. | SIAM |
| ** | Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XVIII, No 7, 1963, pp 3-101. | JPR3 21228 |
| | Vestnik Svyazi, No 6, 1963. | JPRS 21245 |
| | Vestnik Svyazi, No 7, 1963. | JPRS 21358 |
| | Vestnik Svyazi, No 9, 1963, pp 1-32. (NY-7855) | *JPRS |
| | Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Vol XLIV, No 4 5, 1963. | Amer Inst of Phys Sov Phys - JETP Vol XVII, No 4-5 |
| | Zhurnal Neorganicheskoi Khimii, No 11, 1962. | CS |
| | Zhurnal Obshchei Khimii, Vol XXXII, No 12, 1962. | СВ |
| | Zhurnal Prikladnoi Khimii, Vol XXV, No 11, 1962. | СВ |
| | Zhurmal Strukturnoi Khimii, Vol III, No 4, 1962. | СВ |
| | Zhurnal Tekhnicheskoi Fiziki, Vol XXXIII, No 5, 1963. | Amer Inst of Phys Sov Phys - Tech Phys Vol VIII, No 5 |

^{*} In Process

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UNCLASSIFIED Central Intelligence Agency



7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

Manay Latas Safer Sergio N. Alcivar

Chief, CIA Declassification Center, Declassification Review and Referral

Branch

Enclosures:

- 1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
- 2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)



Processing of OGA-Held CIA Documents



The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

| OGA Doc ID Job Num Box Fidr Doc | Job Num | Вох | FIG | | Doc ID | D Document Title | Pub Date Pa | Pages | Decision | Proc Date |
|---|-----------|-----|-----|----|--------|--|-------------|-------|----------------------|-----------|
| AD0834364 | 78-03109A | 52 | - | 9 | 62 | Consolidated Translation Survey For February 1963 | 2/1/1963 | 232 | Approved For Release | 3/25/2004 |
| AD0402915 | 78-03109A | 52 | - | 7 | 63 | Consolidated Translation Survey For March 1963 | 3/1/1963 | 314 | Approved For Release | 3/25/2004 |
| AD0405169 | 78-03109A | 52 | - | 8 | 64 | Consolidated Translation Survey For April 1963 | 4/1/1963 | 278 | Approved For Release | 3/25/2004 |
| AD0409473 | 78-03109A | 52 | - | 6 | 65 | Consolidated Translation Survey For May 1963 | 5/1/1963 | 358 | Approved For Release | 3/25/2004 |
| AD0413153 | 78-03109A | 53 | - | - | 99 | Consolidated Translation Survey For June 1963 | 6/1/1963 | 361 | Approved For Release | 3/25/2004 |
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